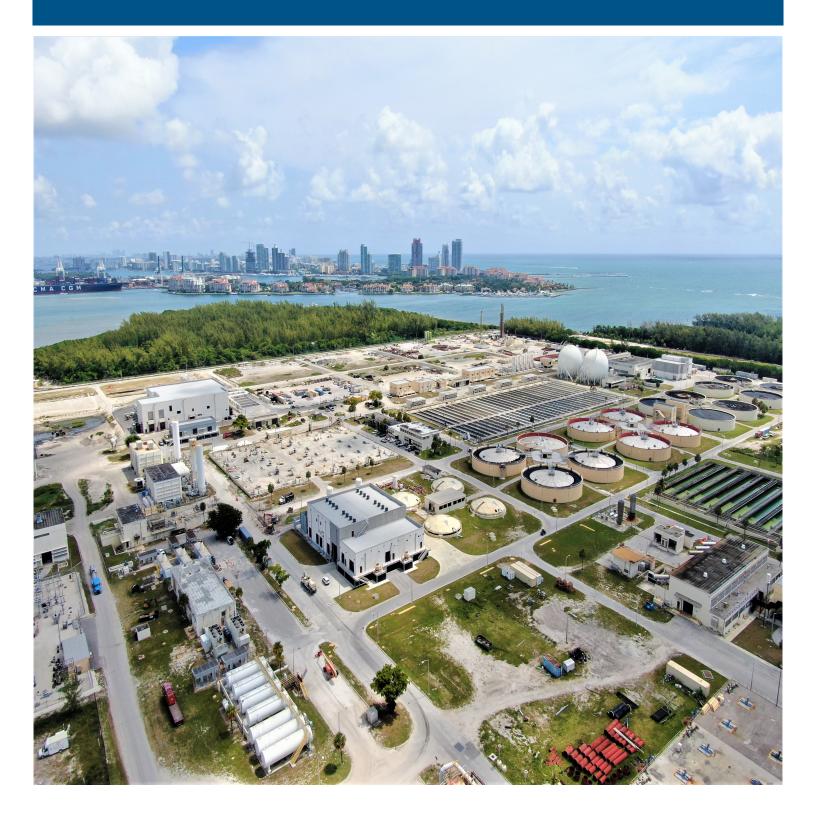


MIAMI-DADE WATER AND SEWER DEPARTMENT A DEPARTMENT OF MIAMI-DADE COUNTY, FL

ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2023





The cover's design is an aerial view of the Central District Wastewater Treatment Plant.

MIAMI-DADE WATER AND SEWER DEPARTMENT

A DEPARTMENT OF MIAMI-DADE COUNTY, FL

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2023 PREPARED BY: CONTROLLER DIVISION AND PUBLIC INFORMATION OFFICE

VISION STATEMENT

A model utility of excellence in reliability, resilience and environmental stewardship, recognized as an essential partner in the protection of public health and an employer of choice in Miami-Dade County.

MISSION STATEMENT

We deliver high-quality, safe, and reliable drinking water and wastewater service in Miami-Dade County where customers know the value of every drop, employees take pride in their contribution, and the pursuit for efficiency and community resilience drives every business decision.



(This page intentionally left blank.)

Miami-Dade Water and Sewer Department

A DEPARTMENT OF MIAMI-DADE COUNTY, FL

Annual Comprehensive Financial Report

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2023

PREPARED BY: CONTROLLER DIVISION AND PUBLIC INFORMATION OFFICE

Table of Contents

INTRODUCTORY SECTION	
Board of County Commissioners	4
Transmittal Letter	5
GFOA Certificate	22
Organizational Chart	23
FINANCIAL SECTION	
Independent Auditors' Report	26
Management's Discussion and Analysis	30
Basic Financial Statements	
Statement of Net Position	34
Statement of Revenues, Expenses and Changes in Net Position	36
Statement of Cash Flows	37
Notes to Financial Statements	39
Required Supplementary Information	68
Supplementary Financial Data	71
Water System	
Schedule of Net Position	72
Schedule of Revenues, Expenses and Changes in Net Position	74
Schedule of Cash Flows	75
Schedule of Operating and Maintenance Expenses	77
Wastewater System	
Schedule of Net Position	78
Schedule of Revenues, Expenses and Changes in Net Position	80
Schedule of Cash Flows	81
Schedule of Operating and Maintenance Expenses	83
STATISTICAL SECTION	
Net Position by Components – Last Ten Fiscal Years	
Combined Water and Wastewater Systems Schedule of Revenue and Expenses – Last Ten Fiscal Years	88
Water System Schedule of Revenues and Expenses – Last Ten Fiscal Years	89
Wastewater System Schedule of Revenues and Expenses – Last Ten Fiscal Years	
Water and Wastewater System Rates – Last Ten Fiscal Years	
Water Treatment – Last Ten Fiscal Years	92
Wastewater Treatment – Last Ten Fiscal Years	93
Debt Services Coverage – Last Ten Fiscal Years	94
Ratio of Outstanding Debt by Types – Last Ten Fiscal Years (in Thousands)	
Customer Statistics Largest System Customers – Current Year and Nine Years Ago	97
Retail Customer Statistics Number of Customers at Fiscal Year-End – Last Ten Fiscal Years	98
Building Permits Number of Building Permits Issued for Housekeeping Units and Value of	
Population Miami-Dade County, Florida – Last Ten Fiscal Years	
Construction Activity Miami-Dade County, Florida – Last Ten Fiscal Years	100
Principal Employers Miami-Dade County, Florida – Current Year and Nine Years Ago	101
Economic Statistics Miami-Dade County Unemployment Rate and Labor Force – Last Ten Fiscal Years	
Employees by Identifiable Activity – Last Ten Fiscal Years	103
Capital Indicators – Last Ten Fiscal Years	
Insurance in Force	105

MIAMI-DADE COUNTY

Daniella Levine Cava

Mayor



BOARD OF COUNTY COMMISSIONERS

Oliver G. Gilbert III Chairman

Anthony Rodriguez Vice Chairman

Oliver G. Gilbert, III District 1

Marleine Bastien District 2

Keon Hardemon District 3

Micky Steinberg District 4

Eileen Higgins District 5

Kevin M. Cabrera District 6 Danielle Cohen Higgins District 8

> Kionne L. McGhee District 9

Anthony Rodriguez District 10

Roberto J. Gonzalez District 11

Juan Carlos Bermudez District 12

> René García District 13

Raquel A. Regalado District 7

> Juan Fernandez-Barquin Clerk of the Court and Comptroller

> > **Pedro J. Garcia** *Property Appraiser*

Geri Bonzon-Keenan County Attorney



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

miamidade.gov

April 2, 2024

Honorable Daniella Levine Cava, Mayor Honorable Oliver G. Gilbert III, Chairman and Members of the Board of County Commissioners Honorable Juan Fernandez-Barquin, Clerk of the Court and Comptroller Pedro J. Garcia, Property Appraiser Geri Bonzon-Keenan, County Attorney Residents of Miami-Dade County, Florida

Ladies and Gentlemen:

We are pleased to present the Annual Comprehensive Financial Report of the Miami-Dade Water and Sewer Department (the Department, a.k.a. WASD) for the fiscal year ended September 30, 2023 (FY 2023). This report presents a full set of financial statements prepared in conformity 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.

Management has established a comprehensive framework of internal controls to provide a reasonable basis for asserting the financial statements are fairly presented. The objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatement and therefore the cost of a control is considered to ensure it does not exceed the benefits to be derived. While the independent auditor has expressed an opinion on the 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. For the fiscal year ended September 30, 2023, the Department received an unmodified opinion from its independent auditors.

This report may be accessed via the Internet at http://www.miami-dade.gov/wasd/reports_financial.asp.

The financial section of the Annual Comprehensive Financial Report encompasses the Management's Discussion and Analysis (MD&A), financial statements, notes to the financial statements, and Required Supplementary Information (RSI) and supplementary financial data. Immediately following the independent auditors' report is the MD&A, which provides a narrative introduction, detail overview and analysis of the Department's financial activities for FY 2023. The 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 Miami-Dade Water and Sewer Department is the largest water and sewer utility in the southeastern United States, serving more than 2.8 million people every day.

The Department's water system, considered the largest water utility in the Southeast United States, serving approximately 462,214 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 (WTP), the shared Hialeah reverse osmosis water treatment plant, and five small auxiliary treatment facilities that service the southernmost area of the County. The three regional plants are John E. Preston, Hialeah and Alexander Orr, Jr. water treatment plants. The total combined capacity of the three regional WTPs is 439 MGD (million gallons per day). There are fourteen wellfields comprised of 95 production wells, 10 Floridian Aquifer wells and five aquifer storage and recovery wells. These wells supply untreated water to the treatment plants.

Most of the water distribution throughout the 400 square miles service area is performed by pumping from the regional treatment facilities and boosted by four remote pumping stations with eight (total) finished water storage tanks. The system consists of more than 8,574 miles of water mains ranging in size from 2 inches to 72 inches in diameter.

The wastewater system serves approximately 377,496 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 (WWTP), over 1,000 sewage pump stations and nearly 6,400 miles of collection and transmission pipelines, manholes, lift stations and force mains. The service area of the system covers approximately 375 square miles. The three WWTPs are the South District, Central District and North District WWTPs. 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 because of the discharge of effluent from the North District Plant and the Central District Plant into the Atlantic Ocean. The State revised this policy when, during 2008, legislation was passed mandating a phase out of ocean outfall discharges.

The South District Wastewater Treatment 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. In FY 2014, the Department finalized operational permit for all the South District's 17 injection wells, which are now fully operational.

The Department continues to plan, and design reclaimed water facilities. Currently, in FY 2023 the Department reused 13 MGD of treated wastewater. The Department is implementing an innovative effluent energy recovery system which will result in the reuse of approximately 115 MGD. When combined with the existing in-plant reuse and the FPL collaboration agreement, the Department will reuse 145.5 MGD and become the largest reuse utility in the East Coast.

ECONOMIC CONDITION AND OUTLOOK

This report, Economic Conditions and Outlook, reviews the level of economic activity throughout Fiscal Year (FY) 2023 and forecasts the area's economic outlook for the next fiscal year.

One year ago, in the year-end outlook for the local economy, it was stated that the strong fundamentals inherited from FY 2021 and FY 2022 would fuel the continued growth despite the headwinds from the loss of fiscal stimulus and tightening of monetary policy during FY 2023. Prospects for growth of the United States' economy were thought to decelerate to somewhere between -2 and +1.8 percent in calendar year 2023, after growing almost 2 percent in calendar year 2022, according to the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD) and the Congressional Budget Office.

Economic activity in Latin America, after experiencing a 3.5 percent increase in 2022, was expected to expand by 1.7 percent in 2023. The similar rates of expansion in the US and Latin American economies were expected to result in a continuation of the existing trading patterns between the regions reflected in the trade flowing through Miami-Dade ports.

Real estate and construction activity in FY 2023 were expected to continue to soften due to the unprecedented price appreciation of FY 2021 and 2022 as well as the rise in mortgage rates brought about by the Federal Reserve's monetary tightening policy.

Tourism indicators, after a blockbuster FY 2022, were also expected to continue growing at a much-reduced pace, with visitors, airline passengers and hotel occupancy gaining slightly from their very robust FY 2022 levels and with cruise ship passenger numbers increasing from their FY 2021 levels and possibly surpassing pre pandemic levels.

Miami-Dade's employment was forecasted to continue to expand albeit at a slower pace as workers become harder to find given the low unemployment rate prevalent at the beginning of the fiscal year.

This forecast of FY 2023 turned out to be a fair assessment of the year to come, even though a "loss of fiscal stimulus" did not end up taking place.

The national economy in FY 2023, indeed slowed compared to FY 2022. Real gross domestic product (GDP) increased at an annual rate of 1.9 percent, a deceleration from the 3.1 percent of the prior year. The deceleration in economic growth was brought about by a slower growth in personal consumption that decelerated from 4.0 percent in FY 2022 to 1.8 percent in FY 2023, combined with a contraction of the investment component that went from growing by 7.6 percent in FY 2022 to contracting by 2.2 percent in FY 2023. Inflation pressures continued to be elevated in FY 2023, although moderating from the prior year level. As a result of the Federal Reserve continuing to increase its key interest rate during the fiscal year, inflation for the fiscal year ended at 5.1 percent, an improvement from the 7.9 percent recorded in FY 2022. This reduction in the level of inflation was accompanied by a drop in the headline unemployment rate of 20 basis points to 3.6 percent.

At the county level, FY 2023 was a year of moderation in which most variables returned to more sustainable and 'normal' levels after FY 2021 characterized by a red-hot residential real estate market, and FY 2022 marked by an unprecedented tourism boom. For FY 2023, the county's unemployment rate decreased, as employment rose. The residential real estate market continued to cool, as it did in FY 2022 and the tourism sector grew modestly throughout.

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

EMPLOYMENT

During FY 2023, nonagricultural wage, and salary employment (annual average) recorded an overall gain of approximately 52,900 jobs. This increase of 4.3 percent left total employment at 1,291,700 according to non-seasonally adjusted data from the Bureau of Labor Statistics. This gain in employment represented a deceleration from the prior year when there was an increase of 6.8 percent. This employment gain resulted in a decrease in the unemployment rate. The average annual unemployment rate for the year was down to 2 percent, compared to 2.9 percent a year earlier.

After deep losses in employment in almost all sectors in FY 2020 and 2021 all sectors recorded gains in FY 2022 except for government. The rebound continued in FY 2023 with only the construction sector recording a contraction in employment, with a loss of 1,800 jobs or 3.6 percent. The sector that gained the most employment, both in absolute and relative terms, was professional and business services, adding 13,000 jobs, or 6.5 percent. The second sector in terms of jobs gains was education and health services with an increase of 10,900 jobs or 5.4 percent, followed by leisure and hospitality with a gain of 7,100 jobs or 5.2 percent. Rounding out the top 5 industries by job gains are, retail trade with a gain of 5,000 jobs or 3.6 percent; and government with a gain of 4,100 jobs or 3 percent.

REAL ESTATE MARKET'

Traditionally, the real estate sector in Miami-Dade County is viewed as one of the most important measures of the county's economic health. After FY 2021 aided by record low mortgage rates, increases in work from home policies, government stimulus and increased inflation expectations that resulted in a red-hot housing market, FY 2022 displayed signs of a moderating real estate market. This moderating trend continued into FY 2023 and can be seen in fewer single-family home and condominium sales as well as in a slowing of the increase in home sales prices.

During FY 2023 sales of existing single-family homes decreased 22 percent from the prior year, from 13,589 to 10,555 homes sold. Sales of condominiums decreased by an even bigger margin, down 36 percent over the prior year to 13,900 units sold. Cash sales accounted for just over 52 percent of all condo sales in FY 2023, up from a 46 percent share in FY2021.

In terms of valuation, housing price appreciation moderated in FY 2023. The median sales price for single family homes rose by 7.6 percent in FY 2023, down from 13 percent in FY 2022 and 24 percent in FY 2021. The median sales price for existing condominiums rose by 6.9 percent in FY 2023 after increasing by 23 percent in FY 2022 and 20 percent in FY 2021.

Roughly midway through FY 2020, the United States Federal Housing Authority announced a foreclosure and eviction moratorium on qualifying residential properties that lasted throughout FY 2021. As a result, data from the Clerk of the Court shows new foreclosure filings plummeted from 5,445 new filings in FY 2019 to just under 3,000 in FY 2020. In FY 2021, with the moratorium still in place, and helped by the strong housing market, new filings dropped even further to 1,933. In FY 2022, with the federal foreclosure moratorium no longer in place, new foreclosure filings increased once again to 2,882 and rose some more in FY 2023 to 3,281.

In terms of new residential construction, following a 25 percent increase for residential units permitted in FY 2021, and a 14 percent in FY 2022 the number of units permitted increase by an additional 4 percent in FY 2023 to 14,295.

The commercial/industrial components of the real estate market remained mostly stable in FY 2023, with the exception of a notable increase in industrial rent prices. Office vacancies decreased from 9.2 to 9 percent, with no change in the average rental rate per square foot. The retail vacancy rate decreased from close to 3.1 to 2.9 percent. Average lease rates for retail in shopping centers fell by 4 percent to \$34.41 per square foot while average lease rates for stand-alone retail declined by 1.2 percent. The industrial market saw vacancy rates drop from 2.6 percent in FY 2022 to 2.1 percent in FY 2023. Average lease rates for industrial space increased by 13.5 percent to \$14.68 per square foot.

SALES INDICATORS

Taxable sales in Miami-Dade County, after reaching their highest level to date in FY 2022 receded slightly in FY 2023. After a 12.5 percent expansion in FY 2022, taxable sales dropped by an inflation adjusted 1.7 percent in FY 2023 to just over \$75 billion.

All categories contracted in FY 2023 except for business investment that saw an increase of 1.6 percent. Autos & accessories, tourism & recreation, consumer durables and non-durables decrease by single digits, while construction declined by 10.3 percent (down \$351 million) and other was down 24.4 percent (or \$26 million).

INTERNATIONAL TRADE AND COMMERCE

International trade and commerce is another key component of Miami-Dade's economy. Trade measured by value passing through the Miami-Dade County's seaport and airport rose 16.5 percent since the Covid-19 pandemic first erupted in 2020 to \$105.7 billion (2023 inflation adjusted dollars). However, from FY 2022, merchandise trade decreased 4.1 percent in FY 2023 from \$110.1 billion from consumer demand dropping over the year as inflation rose.

In contrast to the recurring merchandise trade deficits that the United States maintains year after year, Miami-Dade ports traditionally export more than they import, resulting in a trade surplus over the years. This year, this surplus narrowed as the county trade exports decreased 5.1 percent, while imports decreased 2.9 percent over FY 2023. Most of the Miami-Dade export markets are in South America, Central America, and the Caribbean, and, together with Europe, account for more than 89% of total trade. Most of total U.S. imported perishables from South America and Central America and the Caribbean continue to pass through the Miami-Dade ports.

Two of Miami-Dade County's barometers of trade activity are the freight tonnage moving through Miami International Airport (MIA) and PortMiami. At the former, overall air freight tonnage decreased 1.7 percent in FY 2023 after increasing 13.2 percent the preceding year. At PortMiami, cargo tonnage figures were up by 0.9 percent after decreasing 35.1 percent in the prior fiscal year. PortMiami accounts for nearly 75 percent of total county trade measured by weight, while high-value trade through MIA means the airport accounts for 69 percent of total trade measured by value.

TOURISM

After two years of post-COVID-19 sharp increases in the number of visitors to the state of Florida of 20 percent in FY 2021 and 24 percent in FY 2022, with a more modest increase of 1.7 in percent FY 2023, the state reached 138.1 million overnight visitors, the highest number ever recorded.

In tandem with the rest of the state, after post covid sharp increases in FY 2021 and FY 2022 visitors to the Miami area were flat in FY 2023 at just over 20.5 million overnight visitors, well above the 16.2 million registered in pre-pandemic FY 2019.

Consistent with the trend in overnight visitors, MIA passenger levels stabilized in FY 2023, increasing by a relatively modest 3.7 percent to a record level of 51.6 million passengers, after having increased by 65 percent in FY 2022 and 19 percent in FY 2021. Part of the increase in MIA passengers not translating into overnight visitors is reflected in cruise ship passenger numbers.

After being the hardest hit component of the tourism sector with a complete shutdown, cruise ship passenger levels continued to recuperate the ground loss during the pandemic. In FY 2024, passenger levels increased by over 50 percent during FY 2023 to 6.27 million passengers, closing in on the pre pandemic level of FY 2019 when 6.82 cruise passengers passed through Port Miami.

The modest change in overnight visitors was reflected in a decrease in the hotel occupancy rate from 73.5 percent in FY 2022 to 72.1 percent in FY 2023. This decrease in the occupancy rate was coupled with a decrease in the average daily room rate from \$236 dollars in FY 2022 to \$223 dollars in FY 2023.

FUTURE OUTLOOK

FY 2021 and 2022 were characterized by strong growth and adjustments of various kinds as the economy recuperated from the pandemic and digested the stimulus and policies put in place during and post pandemic. FY 2023 displayed a more normal pattern of growth with less obvious influence from the pandemic and/or pandemic era policies.

FY 2024 should continue in the same vein as FY 2023, displaying moderate growth as well as moderate inflation, with most, if not all, variables changing in normal, single-digit percentage terms.

Because of its location and economic trade and tourism ties, Miami-Dade's economy is influenced by developments in both the broader US and Latin American and Caribbean economies.

On the domestic front, the overall United States economy is expected to continue growing, albeit at a slower pace. After a strong showing in FY 2021, and a moderating pace in FY 2022 and 2023, it is expected that the U.S. growth will continue to slow in FY 2024.

All major institutional forecasts of the United States' economy at the time of this writing predict GDP growth rate for calendar year 2024 of 1.5 percent with the exception of Fannie Mae which forecasts a drop of 0.3 percent. S&P Global, the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD) and the Congressional Budget Office all agree on a 1.5 percent growth rate.

Economic activity in Latin America, after experiencing a 2.3 percent increase in 2023, is expected to expand by 2.3 percent again in 2024. The higher rate of expansion in Latin America vis-a-vis the US is likely to result in a contraction of the trade surplus flowing through Miami-Dade ports.

Real estate and construction activity in FY 2024 is expected to display a similar trend as FY 2023 as mortgage rates continue at their current elevated levels locking in current homeowners and deterring would be buyers.

Tourism indicators will also continue at their elevated FY 2023 levels, meaning that growth will be moderate, with visitors, airline passengers and hotel occupancy gaining slightly from their very robust FY 2023 levels. The exception will be cruise ship passengers, expanding robustly with the introduction of more and bigger ships to the market resulting in passenger counts easily beating their pre-pandemic levels.

Employment should continue to expand overall, but at a slow rate, and most likely not be as broad based as it was in FY 2022 and 2023. This should result in a more normal pattern in which some industries expand, and others contract their level of employment.

In conclusion, evaluating all the likely developments in major areas of the economy leads to a forecast that the Miami-Dade economy appears poised for continued growth in FY 2024 at a slower pace. While inflation appears to be slowing there remains a lot of uncertainty due to the instability in the Middle East and the potential for the conflict to expand. This could have an impact on trade routes and specifically on the price of oil that could trigger repercussions through economies worldwide.

Water System

Water Reset

The Water Reset Program was developed by the Miami-Dade Water and Sewer Department to address existing and emerging needs within the water treatment facilities and the water distribution system. The program includes a comprehensive prioritization of previous condition assessment reports, the American

Water Infrastructure Act (AWIA) Risk and Resilience Assessment (RRA), and other critical projects that address aging infrastructure, redundancy, future regulations, capacity, and modernization.

To prioritize and implement these improvements, the department developed criteria to establish a capital plan prioritization. These criteria include:

- Life, Health, and Safety
- Legal and Current Regulatory Compliance
- Future Regulatory Compliance
- Essential Improvements
- Strategic Alignment
- Infrastructure Risk Management and Resilience
- Financial and Operational Benefits
- Shovel Ready Status

The water reset program is comprised of approximately 100 projects that include generator replacements to ensure continued reliability during severe weather events, filter overhauls to address aging infrastructure and capacity constraints, redundant raw water transmission mains to fortify system reliability, and lead and copper assessments that ensure safe drinking water.

The program endeavors to address future needs by accounting for forthcoming regulatory compliance and modernization projects. These projects include the evaluation of the effects of Polyflourolalkyl Substances (PFAS) on the department's wells, automating the controls at the treatment facilities, and implementing Advanced Metering Infrastructure (AMI) across all retail and volume accounts.

Water-Use Efficiency Plan

The Water Use Efficiency Plan (Plan) is a component of Miami Dade County's (County) Water Use Permit (WUP) issued by the South Florida Water Management District (SFWMD) and approved by the County's Board of County Commissioners. The Plan has been in effect since 2007 and consists of both indoor and outdoor water conservation Best Management Practices (BMPs) that are measured through a quantifiable process affording accountability of water saved through the Plan. Indoor BMPs include rebates for installing high-efficiency fixtures including toilets, faucets, and showerheads in properties located throughout the County. Outdoor BMPs include rebates for retrofits and upgrades to properties that have functioning, inground automatic irrigation systems located in the County. Non-BMP measures in the Plan include the adoption of a permanent two day per week landscape irrigation rule, mandating the installation of waterefficient fixtures in new construction, promoting the use of Florida Friendly methods and landscaping, educational outreach campaigns to residents and businesses and utility water loss reduction efforts. These initiatives have reduced finished water demand by 24 MGD as of December 31, 2022 (year most recent data available), compared to finished water demands in 2006 the year prior to Plan implementation. The County's conservation efforts have also reduced residents' average per capita water use rate used in calculating the annual allocation of water provided in the WUP. This outcome reduces the utility's operating expenses, defers construction of expensive alternative water supply projects to meet future water needs and fulfills the County's efforts to ensure the efficient use of water confirming that water conservation is the least expensive form of alternative water supply.

The overall Plan's objective is to improve water use efficiency, reduce loss and waste, and comply with Florida's legislative criteria and water conservation initiatives.

The following are a list of current indoor and outdoor BMPs implemented by Miami Dade County:

- High-efficiency fixture rebates including toilets, faucets, and showerheads for single-family and multi-family properties
- Senior high-efficiency toilet rebates
- High-efficiency rebates for commercial and lodging facilities
- Free high-efficiency showerhead exchange program for single-family and multi-family properties

- · Free high-efficiency showerhead exchange program for lodging facilities
- · Landscape irrigation evaluation rebates for residential and commercial properties
- · Landscape ordinance requiring the use of Florida Friendly principles
- Implementation of a county-wide permanent two day a week landscape irrigation ordinance
- Tiered rate conservation structure that charges more for increasing water use
- Construction standards effective January 1, 2009, that codify high efficiency plumbing fixtures in new residential, industrial, commercial, and institutional properties
- Comprehensive outreach campaigns to county residents and students
- Continuation of a leak detection survey and repair of the entire water distribution system on an annual basis.

In 2023, the County updated its permanent landscape irrigation ordinance incorporating all SFWMD's rule elements that were not included in the initial ordinance or had been formulated since that time.

Small Watermain Replacement Program

The Miami-Dade Water Distribution system is divided into square mile areas, with each one corresponding to an atlas sheet within the water distribution network map. There are 455 atlas sheets that comprise the water distribution system. To proactively upgrade aging infrastructure, the department has developed the Small Watermain Replacement Program (SWRP) to comprehensively upgrade the water distribution system in each square mile area. The program prioritizes replacements using parameters such as pipe diameter, age, and location of existing water mains.

Each project consists of the programmatic replacement of undersized water mains, rehabilitation, or replacement of water mains with excessive leakage, and the replacement of water mains located in rear easements of private properties with water mains located on the frontage street. The program also includes rear to front service line conversions for properties where the water main was removed from a backyard easement. The SWRP improves water quality concerns and addresses critical fire protection issues in these areas.

Water Reuse

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 for certain types of use. Currently, the Department has been able to replace potable water used for process water at its wastewater treatment plants with reclaimed water. Valuable drinking water is thus conserved by using reclaimed water in several wastewater treatment plant processes. The Department also signed an agreement with Florida Power and Light (FPL) to provide up to 15 million gallons per day (mgd) of treated effluent from the South District Wastewater Treatment Plant, which will be further treated at an Advanced Reclaimed Water Plant to be built by FPL to convert it into process water and used for cooling towers at the Turkey Point complex. The Advanced Reclaimed Water Plant also known as the FPL Miami-Dade Clean Water Recovery Center is expected to be operational in 2025. The Department also continues to evaluate opportunities for cost-effective use of reclaimed water that can reduce demands for potable water and meet the need for additional water for restoration and enhancement of the environment, cooling water, scrubber water, irrigate certain landscaping, and serve industrial water demands for electrical production and air conditioning. Additional opportunities are being explored.

Water and Wastewater Transmission System Computer Models

The Department maintains Water and Wastewater Transmission System Computer Models, which operate with the Geographic Information System (GIS) data on the respective systems. These models are critical for planning and evaluating the availability of system capacity for new developments and system upgrades. The models are also used for the identification of long-range improvements to transmission system facilities, including pumping stations and pipelines as part of Water, Wastewater, and Reuse Water Integrated planning. WASD's Planning Division develops forecasts for water and sewer demands to ensure that all future needs can be met.

Water Rights

Along with WASD's work to maintain, harden, and expand water and wastewater infrastructure, legislative solutions are being forged to ensure a sustainable supply of top-quality water to meet the future needs of our growing community. Miami-Dade County has recently approved legislation authorizing the execution of a Capacity allocation Agreement in Phase 1 of the C-51 Reservoir, which provides the Department with 15 million gallon per day allocation of alternative water supplies through at least 2065.

Wastewater System

Consent Decree Program

The County negotiated a Consent Decree with the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP), which was lodged with the US District Court on June 6, 2013, and entered on April 9, 2014. This Consent Decree is designed to build on the successes achieved by the Department under previous Consent Decree programs. The overarching goal of the Consent Decree is to reduce sanitary sewer overflows and to meet effluent limit requirements of the Clean Water Act from the County's wastewater system.

The Consent Decree requires the Department to upgrade its collection, transmission, and treatment facilities by completing 80 capital improvement projects throughout the wastewater system. It also requires the County to implement Capacity, Management, Operations and Maintenance (CMOM) Programs for the continued improvement of its systems and to eliminate, reduce, prevent, or otherwise control sanitary sewer overflows (SSOs).

As of September 30, 2023, the County's Consent Decree Program has completed sixty-one (61) of its capital improvement projects with an approximate total cost of \$911 million. Fifteen (15) projects with a cost of \$865 million are in the construction phase, and four (4) projects with a cost of \$207 million are in the preconstruction phases of planning and procurement.

During FY 2023 the Consent Decree Program completed an additional 5 projects, met the projected total program fiscal expenditures of \$64 million, and reached a total expenditure of \$1.53 billion since inception.

Regarding the CMOM Program, the County developed ten (10) Capacity, Management, Operations and Maintenance Plans with the objective of incorporating standard operation and maintenance activities with a new set of information management requirements. All these plans have been approved by EPA/FDEP. In addition, the County remains in compliance with five additional plans that are a continuation from previous Consent Decrees.

Implementation of the Consent Decree is underway, and the County remains fully committed in completing the mandated Consent Decree Capital Improvement Projects by 2028.

Ocean Outfall Legislation Program (OOL)

In 2008, the Florida Legislature approved, and the Governor signed a law requiring all wastewater utilities in southeast Florida utilizing ocean outfalls (OOL) for disposal of treated wastewater to reduce nutrient discharges by implementing advanced wastewater treatment by 2018 or equivalent, cease using the outfalls by 2025 and reuse 60 percent of the wastewater flows by 2025. In 2013, the statute was amended to provide greater flexibility to meet reuse requirements and to allow use of the ocean outfalls for peak flows management, not to exceed 5 percent of the annual baseline flows. Because of this law, the Department has analyzed several compliance options. Each option includes additional projected capacity to meet future average daily and peak flow demands. After considering several options, the Department's recommended option includes upgrades to both the Central and North District wastewater treatment plants (WWTP). The upgrades will include the addition of deep injection wells at the Central and North District Wastewater Treatment Plants (WWTP) to eliminate the normal use of the ocean outfalls for disposal of treated wastewater. These upgrades include 14 projects, of which 2 are completed, 4 are under construction, and 8 are in design/permitting.

As part of the Department's normal planning activities, Water and Sewer conducted a thorough re-evaluation of its 2035 projections, including average daily flows, peak hour flows (PHF), and influent solid loadings. Through the Department's continued water conservation efforts, combined with its Inflow and Infiltration Program, wastewater flows have remained relatively flat for the past fifteen years, reducing the current and future need for system capacity. The updated projections have pushed the need for a new plant beyond the initial 2025 target. Therefore, the addition of a proposed West District WWTP, which was part of the Department's 2013 Ocean Outfall Legislation Compliance Plan, will not be needed to comply with the legislation, nor will it be needed by 2025 as originally planned, for capacity purposes. Nevertheless, the facility is still included within the 20-year planning horizon.

The Department selected to implement the equivalent to that which would have been achieved by Advanced Wastewater Technology (AWT) if the requirements were fully implemented beginning December 31, 2018 and continued through December 31, 2025. This is being accomplished by reducing the nutrients (total nitrogen and total phosphorus) being disposed of through the ocean outfall and maximizing the quantity of flow being sent to the existing wells. Since 2008, the Department has been using the existing deep injection wells at the North District WWTP to reduce flow going out to the outfall. In addition, the Department has completed construction of two (2) industrial deep injection wells at the Central District WWTP, which will reduce nutrient loading by removing the waste stream from the centrate process, the gas scrubbers, and the treated effluent from the ocean outfall discharge. The industrial deep injection wells are in operational testing as of November 2019. These wells will enable the Department to divert approximately 30 million gallons per day (MGD) of treated wastewater from Central's ocean outfall.

The Department is implementing an innovative effluent energy recovery system which will result in the reuse of approximately 115 MGD. When combined with the existing in-plant reuse and the FPL collaboration agreement, the Department will reuse 145.5 MGD and become the largest reuse utility in the East Coast.

South District Plant Expansion Program

The South District Wastewater Treatment Plant (SDWWTP) is one of three regional wastewater treatment facilities operated by WASD and serves the southern portion of Miami-Dade County. Since the SDWWTP's service area continues to increase in population due to growth and redevelopment, the Department has prioritized expanding the Plant's capacity to address future projected needs of the community.

The Department has identified eight (8) critical infrastructure projects necessary to increase the permitted capacity of SDWWTP from 112.5 to 131 MGD and increase the peak flow capacity of the Plant from 285 to 305 MGD. Currently, two (2) of the eight (8) projects have been completed with the remaining six (6) projects are under construction. These projects include: the construction of a state-of-the-art electrical distribution building #3, a new Headworks 3 building, new Oxygenation Trains 9 & 10, new electrical substation 57 & 58, new clarifier #12, and various other ancillary treatment process improvements critical to expanding the Plant's capacity. The total capital investment in construction for the South District Plant Expansion Program is approximately \$531 million. The wastewater conveyance system to the three wastewater plants is interconnected so the flow can be directed between wastewater treatment plants to allow for operational flexibility, therefore these expansion projects are part of a regional solution for the wastewater treatment system of the County to meet future flows and loads. These projects will also result in a more robust and resilient facility designed to meet WASD's facility hardening criteria which allow for the continuous operation of the wastewater treatment system during severe climatological events, which are frequent in the South Florida area.

Connect 2 Protect Program

Miami-Dade County's Connect 2 Protect is a multi-year, countywide program that provides sanitary sewer service to residents with septic tank systems. Approximately 9,000 septic systems are vulnerable to compromise or failure under current groundwater conditions. As sea-level rise increases, this number will grow to approximately 13,500 by 2040. Compromised and failing septic systems can cause negative impacts on private properties, pose public health risks, and have negative impacts on our natural resources including Biscayne Bay.

The Little River community is one of the first areas for Connect 2 Protect implementation based on its designation as an Adaptation Action Area, a designation that focuses on those communities most vulnerable to sea-level rise and flooding. Much of the Little River area is low-lying and prone to flooding. Residents report that septic tank systems are failing during heavy rain and high tide events, which has resulted in sewage backing up into homes and the ponding of floodwater on lawns and roadways. In addition to the Little River project, WASD is currently working on the design of laterals for 2,000 parcels across the County that are designated as vulnerable.

The Pump Station Rehabilitation Program

Miami-Dade Water and Sewer has embarked in a Pump Station Rehabilitation Program (PSRP) to address renewal and replacement, capacity, and climate related needs proactively and programmatically across its more than 1,000 sanitary sewer pump stations.

As part of the program, the department is performing on-site field assessment of the mechanical, electrical, instrumentation, and structural components of all sanitary sewer pump station. These assessments, along with capacity and regulatory needs, will direct project prioritization within the PSRP.

During Fiscal Year 2023 there were a combined 51 pump station projects development, one of which were completed. These projects included rehabilitation projects to update aging infrastructure, upgrades to address capacity needs, and relocation projects to site the pump stations to locations better suited for its use, operation, and maintenance. Included in the 51 projects, are climate resilience improvements that elevate critical components above the base flood elevation or ensure that the pump station is wet proofed to withstand storm events. Three projects were specifically intended to address hardening components of pump stations through the Hazard Mitigation Grant Program (HMGP).

Infiltration and Inflow (I & I) Reduction Program

WASD established a Flow Reduction Program (FRP) Division to improve the service of the sanitary sewer system by reducing and mitigating adverse impacts resulting from potential inflow/infiltration (I/I) sources. The reduction of I/I flow will allow for enhanced operational performance, the reduction of treatment and pumping costs, and overall effective service delivery. The FRP aims to significantly and cost-effectively reduce average and peak flows in the sewer system. In addition, this reduction of flow into the conveyance system provides an opportunity to reduce the required capacity improvement infrastructure projects, thereby offering additional savings to the Department and ratepayers. The objective of the FRP is to develop a cost-effective solution that reduces I/I while prioritizing repairs and quantifying savings.

The Department continues to perform sanitary sewer evaluation surveys on the approximate 6,500 miles of sewage collection mains and laterals. During Fiscal Year 2023, more than 2,833 repairs were performed to the gravity system. Resulting in 1,748 digital manhole inspections, 141,810 lineal feet of gravity sewer mains cleaned and inspected via CCTV, 416 total manhole rehabilitations, 41,521 square feet, and 488 installed cured-in-place liners in service laterals and mainline segments. These activities help reduce miscellaneous water entering the wastewater collection system through defects in existing pipe systems. This, in turn, reduces the cost associated with wastewater treatment and disposal.

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 Consent Decree/Settlement Management (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 SCADA terminals, 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 also have SCADA installed and operational. All water wellfields are monitored and controlled by SCADA, and all 95 production wells have flow meters installed with SCADA monitoring for compliance with SFWMD regulations. Upgrades

to the SCADA system are being planned as part of the overall infrastructure upgrades to improve real time management and operational monitoring/control of treatment systems and the distribution and collection systems.

Performance Improvement

The Miami-Dade Water and Sewer Department participates annually in national and state benchmarking surveys including those administered by the American Water Works Association and the Florida Benchmarking Consortium. This process allows for a comparison to other like agencies in the state and across the country through the review of internal key performance indicators.

The business plan is prepared in accordance with the process prescribed by the County's Office of Management and Budget. The plan identifies key issues and priority initiatives, in keeping with the County's Strategic Plan and in furtherance of the Department's mission.

Performance measures are developed and aligned with each division's key priorities and associated resources, to allow the Department to meet the defined objectives. The business plan is currently being updated.

Rate Increase

On September 20, 2022, the Board of County commissioners adopted County Budget Ordinance Number 22-117, effective October 1, 2022, authorizing a 5% rate increase to the Department's retail tiered-based structure that will generate revenues to support costs including fiscal requirements related to capital investments. In addition, effective October 1, 2022, the County Budget Ordinance increased the water wholesale rate by \$0.0629 per thousand gallons from \$1.8644 to \$1.9273 and the wastewater wholesale rate by \$0.2681 from \$3.4741 to \$3.7422 per thousand gallons.

WIFIA Loan

In 2014, the federal Water Infrastructure Finance and Innovation Act (WIFIA) program was established by Congress assist in the financing of the Nation's aging utility infrastructure. It provides low interest loans with flexible terms and up to a 40-year payback period to water and sewer utilities seeking to upgrade or expand their infrastructure.

The adoption of Ordinance 18-7 and subsequently Ordinance 19-09 authorized the County Mayor or County Mayor's designee to enter and execute the related loan agreements. WASD was the first department nation-wide to receive four consecutive low interest loans.

WIFIA Offering Date	Funded Project Summary	Total Project Costs	WIFIA Loan Amount (49%)	Estimated Interest Expense savings	Estimated Direct Jobs
WIFIA 2017	Wastewater Injection Wells	\$203.5M	\$99.7M	\$25.6M	95
WIFIA 2018	Wastewater Electrical Distribution Buildings	\$665.8M	\$326.2M	\$103.8M	266
WIFIA 2019	Upgrades: South District Wastewater Treatment Plant and Additional Injection Wells	\$480.0M	\$235.2M	\$80.2M	173
WIFIA 2020	Upgrades: Central and North District Wastewater treatment Plants	\$865.8M	\$424.2M	\$88.0M	226

To date, the Department has been awarded a total of \$1.1 billion in WIFIA funding. These loans will help to finance approximately \$2.2 billion worth of projects with the department's multi-billion-dollar CIP, create 760 direct jobs and save ratepayers \$297.6 million in interest for the life of these loans when compared to other financing options.

Building Better Communities General Obligation Bonds (GOB)

In November 2004, Miami-Dade County voters approved a \$2.9 billion bond program allowing the County to issue long-term bonds to fund numerous neighborhood and regional capital projects. The General Obligation Bonds (GOB) are legally backed by the full faith and credit of the County which has committed future taxes during the next 40 years to repay the bonds. GOBs typically are the least expensive type of debt available to government. Among the GOB funded capital projects are several current and future water and wastewater infrastructure needs.

On June 3, 2014, the Board of County Commissioners adopted Resolution R-537-14, allocating \$126 Million funding for "Extension of Sewer System to Developed Commercial and Industrial Corridors of the County," aka The Commercial Corridor Project. It is the largest single GOB project under WASD's management. It encompasses the expansion of the sanitary sewer system to remove commercial septic tank systems. The commercial corridor on Bird Road and the Industrial Park Area are being addressed by two Low Pressure Sewer System projects. Also, Basis of Design Report for ten (10) areas within the commercial corridor began in FY2016. The projects identified from these reports include 35 overall projects that will result in the installation of approximately 225,000 linear feet of new wastewater infrastructure and 11 new pump stations. The Adopted 2023-2024 Fiscal Year GOB budget is \$28 million.

GROWING WITH INFORMATION TECHNOLOGY

Technology remains a cornerstone of WASD's operations, driving efficiency enhancements across various areas such as budget and accounting, customer information management, geographic information systems, enterprise asset management, project tracking, billing and metering processes and construction initiatives of the utility. The Department continues to leverage advanced and innovative technology solutions to ensure fulfillment of operational objectives and meeting the evolving requirements of customers.

Systems Infrastructure

The upgrade of WASD computing and technology infrastructure is an ongoing effort. This includes upgrades to servers, storage, network switches, Wi-Fi upgrades, and replacement of obsolete computers (desktop and laptops) to include, the deployment of Windows 11 and Office 365 with accompanying applications: OneDrive, Adobe, and Teams. These applications assist with better management of documents, emails, and audio/video conferencing needs, especially when working in a hybrid environment (remote/on-premises).

Big Data / Business Intelligence

Enhancement rollouts of BI solutions with digital dashboards to enable analysis and documentation of business processes within key business areas for the purpose of reporting and process improvement. New dashboards/reports were developed for Retail Customer Division and New Business Division that included:

- Meter Analysis
- Data Warehousing Auditing Reports
- Report Portal
- SCADA Actuals (Supervisory Control and Data Acquisition)
- MWM Task Scheduling (Mobile Workforce Management)
- Executive Dashboard rebuild from Pyramid and other Pyramid report conversion
- Pump Station Performance
- Consumption Reports
- Retail Customer Division Activity Log Report

Staff continues to improve connectivity to historical and archived SCADA data to leverage the cloud platform providing high availability, advanced security, dynamic environment, and providing the foundation for analytical reporting. Working with all divisions on providing a standard reporting platform for widely used datasets throughout the department and the creation of interfaces to existing data lake for external systems to digest existing data.

Phase 1 of the new Modern Data Architecture (MDA) was completed. This architecture enhances and improves existing cloud data warehousing functionality by providing additional performance and lays the foundation for predictive analytics. Initial phase uses the latest technologies for better performance, development maintainability and advanced storage capabilities. Subsequent phases will include additional datasets from operational systems including Financials, SCADA, EAMS (Enterprise Asset Management System), and supporting systems.

SharePoint/Intranets

All WASD Intranet sites have been converted to SharePoint Online. This cloud-based environment provides a robust, user-friendly ecosystem that allows users to share and collaborate information within the WASD department. Information is available from anywhere on any type of device with a web browser that is connected to the County network. It provides a rich user experience for sharing files and storing documents and provides users flexibility and freedom to manage their own lists and document libraries. In addition, it provides a development platform for specialized applications within the same framework when needed.

We continue to expand Divisional Team sites hosted on WaterHub as they are requested and enhance existing sites with advanced functionality. Several areas are starting to use SharePoint for task tracking with enhanced workflow functionality to keep track of department tasks with automated notifications and updates.

In-house Development

Our commitment to supporting the existing application portfolio remains steadfast. This involves the modernization and consolidation of existing applications and the sunsetting of legacy applications that are no longer supported or meet current security standards. In FY 2023, significant headway was made in various ongoing projects, notably the Lenel Access Control & Badging system, the modernization of Front Desk Customer application and the modernization of the WASD Application Paving System (WPDS). Furthermore, we continue to provide support for all legacy applications within our portfolio and implementing new enhancements and updating existing features.

Meter to Cash

WASD Internet Self-Service application (SSA) continued to expand. New features such as the Historical Meter Consumption were developed. This feature allows a customer to download historical consumption data by meter, which they can use to update EPA Energy Star website or other uses. Another enhancement was the migration from Universal Google Analytics (UGA) to Google Analytics 4 (GA4), which has resulted in improved SSA analytics. Automated Customer Satisfaction Surveys were also implemented for Customer Service and Comm Center respectively. On-going projects include new Self-Service feature called Start Services, upgrade of Customer Care and Billing (CCB) system to the Customer Cloud Service (CCS) and the migration of all CCB Cognos reports to the Meter to Cash Data Warehouse using Power BI as reporting tool.

Enterprise Resource Planning (ERP) Financials

In FY 2023, the Department was primarily focused on three projects:

- Device selection for the annual physical inventory process
- The AP Invoice Automation Project
- Upgrade of the Peoplesoft Financial system

The Device selection project was completed and rolled out to the users in the 2nd quarter of FY 2023. The new device (Samsung Galaxy XCover6 Pro) along with the new architecture for barcode scanning (Samsung Knox Capture app) has resulted in substantial savings to WASD as compared to the previous solution. The physical inventory process with the new device was completed successfully with no major issues.

All development activities were completed during the FY 2023 for the Invoice Automation project. The system test and user acceptance testing will begin in the 1st quarter of FY 2024 with a go live early in the 2nd quarter of FY 2024. This project will result in substantial productivity gains for the WASD finance department.

The upgrade of the Peoplesoft Financial system from 8.57.04/PUM31 to 8.60.07/PUM48 is in progress. Custom objects were retrofitted, and system tested. Two rounds of user acceptance testing will begin in 1st quarter of FY 2024, and with go live in the 2nd quarter of FY 2024. The updated system will allow for management reporting and will create visual dashboards for its users.

Enterprise Asset Management System (EAMS)

In FY 2023, there were significant implementations developed that included adding the Safety and Collections divisions in EAMS. Other implementations included the development of the Emergency Alert Notification system by adding the Microsoft Teams alerts, and including a mobile dashboard which allows management to be alerted on major disruptions in the water/ sewer operations for the department. Additionally, the Damage Investigation Unit (DIU) was completed in EAMS. With these new implementations, 178 new tablets were deployed for staff. A multitude of enhancements requested by the division to mitigate bugs and improve functionality was prioritized and completed. The team also has modernized major support elements of the software system, that included improving the underlining integration components, and middleware for communication with ERP. The team also completed a significant upgrade of the software from version 11.4 to 11.7 in November 2022, which improved and added new features for WASD EAMS users. To minimize upgrade issues moving forward, the upgrade also included reprogramming various integration applications.

eBuilder Implementation

In FY 2023, data and document migration efforts for the contracts and agreements related to the Capital Improvement Program (CIP) projects were completed. In total, over 4,000 migration events were performed associated with over 300 projects, as well as 200K documents were migrated. Access to the Proliance legacy system was removed for most users, except compliance staff. CIP projects and related contract transactions are now performed in eBuilder. Pending is the final decommissioning of the Proliance system scheduled for December 2023.

Geographic Information System (GIS) Solutions

GIS/EAMS Retirement Assets Automation batch process was developed to provide EAMS team with a catalog of retired GIS assets information. This process runs on a monthly schedule and notifies EAMS team members via email. The EAMS team will then be able to use the list to retire assets no longer in GIS infrastructure but are still active in EAMS. GraniteNet CCTV Inspections system used for tracking and maintaining gravity main and manhole video inspections was migrated in FY2023 to version 5.4.2. The migration process included databases, desktops, and field truck computers. Additionally, a new Web Office and Web Sync server was installed, which enables automatic field truck inspection updates.

Well and Septic to Sewer Solution was developed to facilitate the analysis of potential vulnerability of septic tanks and wells within parcel areas throughout the County. Completed web viewer migration to a new platform for FY2023 with additional staff training in the works. The WASD Field Survey Maintenance web application was completed which enables the Chief Surveyor's team and the WASD GIS maintenance staff to seamlessly collaborate with ongoing field activity pertaining to WASD infrastructure assets. As part of the enhanced process, WASD survey teams can upload documents and pictures of the area for clarifying existing issues or creating additional information. AutoCAD to GIS Solution phase 2 was initiated using ESRI ArcGIS for AutoCAD extension to facilitate and standardized all electronic as-builts submitted to WASD. The template will incorporate all required features that are currently in WASD's Enterprise GIS, thus enabling a seamless process for integrating as-builts CAD data to GIS. Schema template revisions were completed to support newer AutoCAD versions.

The expedited as-built to GIS process which allows GIS Data Maintenance to use judgement calls based on previous experience and best practices continues to improve the productivity metrics of the unit. While the average hours per task completion remained steady at an average 33 hours, the number of projects completed increased 13% from the previous fiscal year.

The number of assets digitized also saw an increase of 21% for feet of pipes added/modified and a 17% increase for number of above ground assets added/modified.

MyWASD Utility Coordination process continues as WASD and the Geospatial Utility Solutions (GUS) group coordinate to incorporate additional Municipalities to the County wide process for utility coordination of roadway construction projects. This year, the City of Coral Gables finalized their data submittal process and schema. Additionally, there are ongoing efforts with other municipalities to ensure future updates and support for this solution.

COMMUNITY OUTREACH

The department's Office of Public Engagement is (OPE) tasked with communicating and marketing the activities, programs and services of the Miami-Dade Water and Sewer Department to customers, the media, local governments, and other stakeholders including educating the public on the quality of its drinking water, its operations, under-utilized customer services, water conservation and the department's on-going Multi-Year Capital Improvement Program.

WASD provides direct customer outreach and advertising via radio, television, print, transit bus benches, movie theatres, publications, and the Internet about water quality, conservation programs, and customer service programs and services. In addition to traditional forms of media such as newspapers, television, and radio talk shows, the OPE also utilizes Facebook, Twitter, Instagram and YouTube to capture a wider and more diverse audience.

On behalf of the department, OPE also entered into a collaborative partnership with the University of Miami Hurricanes football team to increase audience reach and leveraging their brand popularity to promote the department's services. WASD received a video, social media spots, football game promotions and activations as part of the FY22-23 contract.

For the second consecutive year, OPE's efforts on behalf of the department's communications was ranked number one for large water utility for the South region of the United States as part of the JD Power rankings in 2023. This was also the second consecutive year the department was recognized as number one in overall Customer Satisfaction. OPE coordinated a media and employee event when the JD Power trophy was presented to the department. The department was also ranked number one for price, conservation, billing and payment, and quality and reliability.

OPE has also planned and executed numerous high profile and well attended public/media events in FY 22-23. To support the department's ongoing commitment of the Connect 2 Protect, septic to sewer conversion program, staff planned and managed the groundbreaking event for the District 1 project that garnered positive press coverage of bringing County sewer services to areas previously not served, which mitigates environmental impacts to Biscayne Bay caused by failing septic tank systems and improves economic opportunities.

OPE also planned and managed the South District Wastewater Treatment Plant Expansion groundbreaking to promote the \$600 million investment at the plant which will increase capacity, future-proof the infrastructure and provide an overall regional solution for the system to meet future demand. The event also announced the department's new innovative strategy for Industrial Water Reuse, which when fully implemented, will make the department the number one utility in Florida and the East coast, for industrial water reuse.

Staff coordinated an employee event to celebrate a partnership between the department and AFSCME Local 121 on a gainsharing initiative resulting in a total cost savings of more than \$250,000, for a Consent Decree project at the Central District Wastewater Treatment Plant.

Partnering with Mayor Daniella Levine Cava's office and other County agencies, OPE staff provided outreach support during the Imagine a Day without Water Community Festival at the Deering Estate in October 2022. Through a collaboration with the Veterans Administration Hospital in Miami, OPE staff coordinated the delivery of more than 1,500 reusable water bottles to their staff who distributed it to homeless veterans so this underserved community can always have an opportunity to stay hydrated.

OPE promoted the Low Income Housing Water Assistance Program through numerous press releases, web articles and social media posts to ensure eligible customers could benefit from the federal funding the state of Florida was administering to assist qualified individuals pay their water and sewer bills. Nearly 5,000 customers will benefit from approximately \$12.1 million in financial assistance.

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 for 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 Annual Comprehensive Financial Report for the fiscal year ended September 30, 2022. 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. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive 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 40 fiscal years. We believe our current report continues to conform to the Certificate of Achievement program requirements and are submitting it to the GFOA.

ACKNOWLEDGMENTS

We would like to thank all 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 Office of Public Engagement (OPE), and the County's Internal Services Department's Printing and CCED Creative & Branding Services, 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.

1 loly

Roy Coley Director

Hances J. Morris

Frances G. Morris Deputy Director, Chief Financial Officer



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Miami-Dade Water and Sewer Department Florida

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

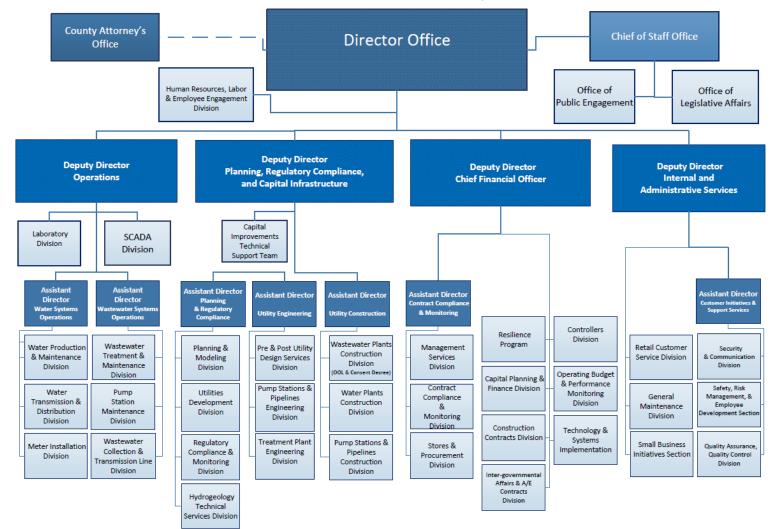
September 30, 2022

Christophen P. Morrill

Executive Director/CEO

ORGANIZATIONAL CHART

Miami-Dade Water and Sewer Department



(This page intentionally left blank.)

Financial Section



INDEPENDENT AUDITORS' REPORT

To the Honorable Daniella Levine Cava, Mayor, and Honorable Chairperson and Members of the Board of County Commissioners Miami-Dade County, Florida

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Miami-Dade Water and Sewer Department, a department of Miami-Dade County, Florida (the "Department"), as of and for the fiscal year ended September 30, 2023, and the related notes to the financial statements, which collectively comprise the Department's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the Department as of September 30, 2023, and the respective changes in financial position, and its cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Department and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

Marcum LLP = One Southeast Third Avenue = Suite 1100 = Miami, Florida 33131 = Phone 305.995.9600 = Fax 305.995.9601 = www.marcumilp.com

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Department's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Department's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Department's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control—related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 30-33, and the schedule of changes in total OPEB liability and related ratios, the schedules of the Department's proportionate share of the net pension liability and the schedule of the Department's contributions on pages 68-70 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements. The information identified in the table of contents as supplementary financial data is presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic 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 basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory and statistical sections but does not include the financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated April 2, 2024, 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 solely 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 the effectiveness of the Department's 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 Department's internal control over financial reporting and compliance.

Marcune LLP

Miami, Florida April 2, 2024

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 (the Department) for the fiscal year ended September 30, 2023. 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 in the transmittal letter in the introductory section and the financial statements in the financial section of this report. The basic financial statements include the statement of net position; statement of revenues, expenses, and changes in net position; statement of cash flows; and notes to the financial statements.

The statement of net position presents the financial position of the Department as of a specific date. It provides information about the nature and amount of resources (assets and deferred outflows) and obligations (liabilities and deferred inflows), with net position being the difference between assets and deferred outflows and liabilities and deferred inflows. 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 statement 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 statement of cash flows presents the cash activities of the Department segregated in the following four major categories: operating, non-capital, 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, 2023 and 2022 is shown on the following page. The unrestricted portion of net position (available to meet ongoing and future obligations of the Department) increased by \$9.1 million, or 5.7% in 2023.

Total expenses increased by \$71.7 million, or by 8.0%, in 2023. The increase is primarily due to bad debt expense, pension expense, chemical and administrative support charges and improvements in the water purification process.

Total net position as of September 30, 2023 is approximately \$2.9 billion. The Department's total net position increased by \$132 million, or by 4.81%.

		(In tho	usands)	
		2023	,	2022
SUMMARY OF NET POSITION				
Current and other assets	\$	1,543,353	\$	1,777,810
Capital assets, net		6,063,549		5,649,519
Total assets		7,606,902		7,427,329
Deferred outflows of resources		195,901		206,053
Total assets and deferred outflows of resources		7,802,803		7,633,382
Current liabilities		454,595		385,479
Long-term liabilities		4,455,250		4,485,875
Total liabilities		4,909,845		4,871,354
Deferred inflows of resources		14,079		15,281
Total liabilities and deferred inflows of resources		4,923,924		4,886,635
Net position				
Net investment in capital assets		2,120,422		1,841,503
Restricted		589,321		745,174
Unrestricted		169,136		160,071
Total net position	\$	2,878,879	\$	2,746,748
SUMMARY OF CHANGES IN NET POSITION				
Water operating revenues	\$	430,476	\$	397,875
Wastewater operating revenues	Ŷ	523,936	Ŷ	473,058
Investment income (loss)		60,925		(9,349)
Disaster revenue		1,541		896
Customer connection fees		38,729		39,620
Insurance proceeds		8		
Other revenues		3,562		9,235
Total revenues		1,059,177		911,335
Water source of supply		17,140		15,462
Water power and pumping		2,212		2,139
Water purification		90,212		83,524
Water transmission and distribution		49,186		44,619
Wastewater collection system		39,252		36,064
Wastewater pumping		64,514		56,337
Wastewater treatment		137,878		124,869
Customer accounting		(5,654)		15,681
Customer service		28,844		27,502
General and administrative		158,574		103,316
Depreciation and amortization		241,630		234,800
Interest expense		133,581		140,947
Other nonoperating expenses		10,466		10,893
Total expenses		967,835		896,153
Income (loss) before contributions		91,342		15,180
Capital contributions		40,789		31,808
Increase in net position		132,131		46,988
Net position at beginning of year		2,746,748		2,699,760
Net position at end of year	\$	2,878,879	\$	2,746,748
, ··· ··· , ··	Ŧ	,		,,

CAPITAL ASSETS

The following table summarizes the Department's capital assets, net of accumulated depreciation and amortization, for the fiscal years ended September 30, 2023 and 2022 (in thousands). Total Capital Asset increased by \$414.0 million, or 7.3%. This increase was due to an increase in capital additions, net of plant retirements and reclassifications of \$631.8 million, offset by \$218 million net increase in depreciation / amortization . Additional information on changes in capital assets can be found in Note 6 to the financial statements.

	(In thousands)			
	2023			2022
Land	\$	84,872	\$	80,571
Building and building improvements		22,431		23,474
Structures and improvements		3,386,715		3,306,232
Equipment		494,728		435,514
Intangible Asset - C51-Water Rights		68,179		—
Lease (Right-To-Use)		539		—
SBITA (Right-To-Use)		14,763		900
Construction work in progress		1,991,322		1,803,728
Total capital assets, net	\$	6,063,549	\$	5,650,419

This year's major expenditures in capital assets included:

Water projects:

- Transmission mains, meters, and services (\$63 million)
- Treatment facilities and equipment (\$25 million)
- General Plant Buildings (\$6 million)
- Wells (\$70 million)
- Construction equipment (\$4 million)

Wastewater projects:

- Treatment facilities (\$318 million)
- Force mains (\$31 million)
- Pump stations (\$26 million)
- Inflow/infiltration/exfiltration (\$8 million)
- Gravity mains and services (\$21 million)

Budgeted capital expenditures for fiscal year 2023 amount to \$783 million and include \$208 million in water projects and \$575 million in wastewater projects.

LONG-TERM DEBT

Long-term debt outstanding (including current portion) at September 30, 2023 and 2022 is presented in the following table. FY 2023 shows a decrease of \$112.9 million from FY 2022.

	(In thousands)				
	2023			2022	
Revenue bonds	\$	3,943,732	\$	4,046,347	
State loan obligations		194,488		204,830	
Notes payable		1,360		1,321	
Total long-term debt	\$	4,139,580	\$	4,252,498	

The Department is required to maintain rates and charges sufficient to meet three 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 1.79 percent. Second, adjusted net operating revenues, after payment of revenue bond debt service, must be at least equal to 9.73 percent of the debt service for the subordinate state loan obligations. The Department met the third debt service coverage with a ratio of 7.73 percent.

In September of 2023, the Department entered into a \$69.0 million Capacity Allocation Agreement, for 15 mgd of water capacity shares, between Miami-Dade County and Palm Beach Aggregates, LLC (PBA). The agreement gives the Department the right to utilize a 15 million gallon per day (MGD) allocation of alternative water supplies through at least the year of 2065. The Department recognized an intangible asset for the acquisition of the water capacity shares rights. The asset is being amortized over 42 years in an amount equal to the scheduled amortization of the original note issued to purchase the rights. As of September 30, 2023, the net balance of the intangible asset was \$69.0 million.

REQUEST FOR INFORMATION

Questions concerning this report or request for additional information should be directed to Frances G. Morris, Chief Financial Officer at 786-552-8104 or, at her office address at 3071 SW 38th Avenue, Miami, Florida 33146.

Statement of Net Position

	September 30,	2023
		(In thousands)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents		\$ 85,797
Investments		128,685
Accounts receivable		
(net of allowance for uncollectible accounts of \$52.0 million)		219,714
Inventory of materials and supplies		54,664
Other current assets		1,845
Restricted cash and cash equivalents		277,805
Total current assets		768,510
NONCURRENT RESTRICTED ASSETS:		
Restricted cash and cash equivalents		40,995
Investments		731,752
Long-term receivable		2,096
Total restricted assets		774,843
CAPITAL ASSETS:		
Land		84,872
Construction work in progress		1,991,322
Building and building improvements		41,624
Structures and improvements		6,381,006
Equipment		1,604,977
Intangible lease asset-equipment		660
SBITA's		15,483
Intangible assets- C51 Water Rights		69,000
Less accumulated depreciation		(4,123,733)
Less accumulated amortization		(1,662)
Total capital assets		6,063,549
Total noncurrent assets		6,838,392
Total assets		7,606,902
DEFERRED OUTFLOWS OF RESOURCES:		
Loss on refundings		130,370
Outflow related to pension		53,119
Outflow related to post-employment benefits		12,412
Total deferred outflows of resources		195,901
Total assets and deferred outflows of resources		\$ 7,802,803

Statement of Net Position

September 30),	2023
(Continued)	(n thousands)
LIABILITIES		
CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSETS)	:	
Accounts payable and accrued expenses	\$	141,202
Customer and developer deposits		18,961
Current portion of lease/SBITA liability		2,288
Liability for compensated absences		13,200
Other liabilities		1,139
Total current liabilities (payable from unrestricted current assets)		176,790
CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):		
Accounts payable and accrued expenses		61,234
Retainage payable		40,923
Current portion of long-term debt		99,718
Accrued interest payable		74,738
Liability for self insurance		1,192
Total current liabilities (payable from restricted current assets)		277,805
Total current liabilities NONCURRENT LIABILITIES:		454,595
		3,854,392
Revenue bonds payable, net State loan obligations, net		184,110
Notes payable		1,360
Liability for self-insurance		3,600
Liability for compensated absences		59,609
Liability for post-employment benefits		58,402
Net pension liability		255,163
Other Non-Current Liabilities - Restricted		16,509
Lease/SBITA liability		13,555
Unearned revenues (LIHWAP)		8,550
Total noncurrent liabilities		4,455,250
Total liabilities		4,909,845
DEFERRED INFLOWS OF RESOURCES:		
Inflow related to pension		6,607
Inflow related to post-employment benefits		7,472
Total deferred inflows of resources		14,079
Total liabilities and deferred inflows of resources		4,923,924
NET POSITION Net investment in capital assets		2,120,422
Restricted for:		225 000
Capital projects Debt service		325,990 263,331
Unrestricted		
		169,136
Total net position Total liabilities, deferred inflows of resources and net position	\$	2,878,879 7,802,803
	φ	1,002,003

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

Statement of Revenues, Expenses and Changes in Net Position

For the fiscal year ended September 30,		2023
	(In	thousands)
OPERATING REVENUES:		
Water	\$	430,476
Wastewater		523,936
Total operating revenues		954,412
OPERATING AND MAINTENANCE EXPENSES:		
Water source of supply		17,140
Water power and pumping		2,212
Water purification		90,212
Water transmission and distribution		49,186
Wastewater collection system		39,252
Wastewater pumping		64,514
Wastewater treatment		137,878
Customer accounting		(5,654)
Customer service		28,844
General and administrative		158,574
Total operating and maintenance expenses		582,158
Operating income before depreciation/amortization		372,254
DEPRECIATION AND AMORTIZATION EXPENSE		241,630
Operating income		130,624
NON-OPERATING REVENUES (EXPENSES):		
Investment income		60,925
Interest expense		(133,581)
Amortization of issuance costs		(7,623)
Disaster revenue		1,541
Customer connection fees		38,729
Insurance Proceeds		8
Other revenues		3,562
Other expenses		(2,843)
Income before contributions		91,342
Capital contributions		40,789
Increase in net position		132,131
Net position at beginning of year		2,746,748
Net position at end of year	\$	2,878,879

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

Statement of Cash Flows

For the fiscal year ended September 30,		2023
	(Ir	thousands)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash received from customers	\$	1,015,039
Cash paid to suppliers for goods and services		(233,776)
Cash paid to employees for services		(259,004)
Net cash provided by operating activities		522,259
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Third party meter installation and replacement costs		(2,500)
Long term receivable		404
Net cash used by non-capital financing activities		(2,096)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Proceeds from bond issues, loan agreements and notes		182
Principal payments - bond, loans		(96,996)
Principal payments - Lease/SBITA		(300)
Bond premium and issue costs		(20)
Interest paid		(151,832)
Acquisition and construction of capital assets		(577,969)
Net cash used by capital and related financing activities		(826,935)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investment securities		(1,619,880)
Proceeds from sale and maturity of investment securities		1,597,949
Interest on investments		266,171
Net cash provided by investing activities		244,240
Net decrease in cash and cash equivalents, and restricted cash and cash		
equivalents		(62,534)
Cash and cash equivalents, including restricted cash and cash equivalents, at beginning of year		467,131
Cash and cash equivalents, including restricted cash and cash equivalents,		
at end of year	\$	404,597

Statement of Cash Flows

(Continued) (In thousand	nds)
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:	
Operating income \$ 1	130,624
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation and amortization 2	241,630
Provision for uncollectible accounts	(14,636)
Non-operating other, net	66,760
(Increase) decrease in assets and deferred outflows:	
Accounts receivable	18,342
Inventory of materials and supplies	(4,670)
Other current assets	(9)
Contracts/Grants receivable	227
Deferred outflows related to pension and OPEB	2,528
Increase (decrease) in liabilities and deferred inflows:	
Accounts payable and accrued expenses	59,083
Customer and developer deposits	(1,782)
Accrued interest payable	(2,148)
Liability for compensated absences	6,453
Other liabilities	(27,958)
Liability for other post-employment benefits	4,936
Liability for self-insurance	403
Net pension liability	43,678
Deferred Inflows related to pension and OPEB	(1,201)
Net cash provided by operating activities	522,259
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES	
Property, plant and equipment contributions were received in amounts of \$40.8 million in fiscal year 2023.	
The change in the fair value of investments was a \$17.3 million increase in fiscal year 2023.	
The Lease (right-of-use asset) initiation amount was \$660 thousand in fiscal year 2023.	
The SBITA (right-of-use asset) initiation amount was \$15.4 million in fiscal year 2023.	
RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR	
Unrestricted current cash and cash equivalents \$	85,797
Restricted current cash and cash equivalents 2	277,805
Restricted noncurrent cash and cash equivalents	40,995
Total cash and cash equivalents at end of year \$ 4	104,597

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

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

REPORTING ENTITY

The Miami-Dade Water and Sewer Department (the Department) functions as a self-supporting governmental enterprise fund of Miami-Dade County, Florida (the County). An enterprise fund is used to account for providing 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 annual comprehensive financial report and its financial statements are combined in the County's annual comprehensive 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 intersystem 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).

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 the last reading of the meters based on the billing cycle. Unbilled accounts receivable for fiscal year 2023 were approximately \$57.4 million.

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. Expenses 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 acquisition value on the date received.

Only those intangible assets valued at more than \$200,000 are recorded as an asset (threshold determinations are based on aggregate cost).

Annualized depreciation and amortization expense, expressed as a percent of depreciable/amortizable capital assets, was 3.0% for fiscal year ended September 30, 2023. The Department utilizes the single-unit straight-line depreciation/amortization method with normal retirements charged to accumulated depreciation/ amortization and a gain or loss is recognized on retirements. Assets with a change in estimated life are depreciated/amortized 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
	(Ye	ars)
Structures and improvements	25-45	25-45
Building and Building Improvements	40	40
Machinery and Equipment	3-20	3-20
Lease (Right-To-Use)	Through lease maturity	Through lease maturity
SBITA	Through subscription maturity	Through subscription maturity
Intangible Asset - C51 Water Rights	42	42

Total depreciation and amortization expense for the fiscal year ended September 30, 2023 was \$241.6 million.

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 fair 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.

Investments are carried at fair value. Fair Value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The net increase or decrease in the fair value of investments is included as part of investment income in the accompanying statement of revenues, expenses, and changes in net position.

The Department categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States (GAAP). The hierarchy is based on the valuation input used to measure the fair value of the asset with Level 1 assets being those where quoted prices in an active market for identical assets can be readily obtained, and Level 2 assets value using a matrix pricing technique of quoted prices for similar assets or liabilities in active markets.

INVENTORY

Materials and supplies inventories are stated at weighted average cost.

INTEREST ON INDEBTEDNESS

The Department expenses interest as incurred.

BOND DISCOUNT AND PREMIUM

Discounts and premiums on bonds are amortized using the straight-line method over the life of the related bond issuances. Discounts and premiums are presented net of the related debt.

CAPITAL CONTRIBUTIONS

The Department records external capital contributions as revenues.

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.

IMPLEMENTATION OF NEW ACCOUNTING STANDARDS

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*, which became effective for fiscal year ended June 30, 2023. This standard will provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations(3) related note disclosures. This statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. This standard did not have an impact on the Department's financial statements.

In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, effective for reporting periods beginning after June 15, 2022. The objective of this statement is to address issues related to public-private and public-public partnerships (PPP) and provides guidance for accounting and financial reporting for availability payment arrangements (APA). The Statement provides specific guidance on the accounting and financial reporting for PPP and APA transactions. This Statement has no impact on the Department for the fiscal year ending September 30, 2023.

In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*, effective for reporting periods beginning after June 15, 2022. The objective of this statement is to improve financial reporting by establishing a definition for subscription-based information technology arrangements (SBITA) and providing uniform guidance for accounting and financial reporting for transactions that meet that definition.

In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*, which became effective, in part, for fiscal year ended June 30, 2023. The objectives of this statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees.

COMPENSATED ABSENCES

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

COST ALLOCATION

Certain overhead and other common 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 relationship with the type of allocable expenditure.

USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflow of resources, liabilities and deferred inflow of resources at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

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, except for 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 accounts are participants in such pooling, sharing on a pro-rata basis in the pooled earnings, according to their respective average monthly balances.

DEPOSITS

The bank balances at local depositories were \$21.7 million, 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 institution. Any losses to public depositors 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, 2023 was approximately \$0.2 million.

INVESTMENTS

The below hierarchy is based on the valuation input used to measure the fair value of the asset with Level 1 assets being those where quoted prices in an active market for identical assets can be readily obtained, and Level 2 assets valued using a matrix pricing technique of quoted prices for similar assets or liabilities in active markets. Level 3 is for assets that have unobservable valuation inputs and should only be used when Level 1 and Level 2 inputs are unavailable. The County does not have any Level 1 or Level 3 inputs.

The Department's carrying value of cash equivalents and investments include the following as of September 30, 2023:

		Fair value
Investments Level 2	2023	
Commercial Paper	\$	323,791
Federal Home Loan Bank		663,786
Federal Home Loan Mortgage Corporation		47,813
Federal Farm Credit Bank		37,777
Federal National Mortgage Association		35,958
Treasury Notes		119,009
Jubilee Issue Bonds		3,081
Total Investments	\$	1,231,215
Cash Equivalents		
Interest Bearing		37,530
Total Investments and Cash Equivalents	\$	1,268,745

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 authorized 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 initiation of the transaction.

The following table summarizes the investments by type and credit ratings at September 30, 2023:

	Credit Ratings
	2023
Federal Home Loan Mortgage Corporation	AA+/Aaa/AAA
Federal Home Loan Bank	AA+/Aaa/N/A
Federal Farm Credit Bank	AA+/Aaa/AAA
Federal National Mortgage Association	AA+/Aaa/AAA
Treasury Notes	AA+u/Aaa/P-1/A
Commercial Paper	A-1+/P-1/F1+
Jubilee Issue Bonds	AA-/A1/A+
Interest Bearing	AAAm/Aaa-mf/ AAAmmf

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, 2023, 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 banker's 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 banker's acceptances. A maximum of 20% of the portfolio may be invested in agencies and in the percentes agreements with the exception of one (1) business day agreements. 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, 2023, the following issuers held 5% or more of the investment portfolio:

	% of Portfolio 2023	
Commercial Paper	25.52	
Federal Home Loan Bank	52.32	
Treasury Notes	9.38	

The schedule excludes investments issued or explicitly guaranteed by the U.S. government.

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, 2023, the Department had the following investments with the weighted average maturity in years.

	Weighted Average in Years 2023
Federal Home Loan Mortgage Corporation	3.33
Federal Home Loan Bank	1.07
Federal Farm Credit Bank	1.33
Federal National Mortgage Association	2.32
Treasury Notes	.43
Commercial Paper	.49
Jubilee Issue Bonds	1.27

FOREIGN CURRENCY RISK

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

3. RECEIVABLES

Receivables for fiscal year ended September 30, 2023 was as follows (in thousands):

	2023	
Trade accounts	\$	244,871
Non-retail accounts		26,521
Grants & contracts		2,096
Other county funds		368
Gross receivables		273,856
Less: allowance for doubtful accounts		(52,046)
Net receivables	\$	221,810

The allowance for doubtful accounts is determined principally on the basis of past collection experience as well as consideration of current economic conditions and customer collection trends. Allowance for doubtful accounts was approximately \$52 million and \$66 million, as of September 30, 2023 and 2022, respectively.

4. OTHER CURRENT ASSETS

Other current assets activity for fiscal year ended September 30, 2023 was as follows (in thousands):

	2023	
Beginning balance	\$	1,836
Prepaid expenses		(11)
Prepaid property insurance		20
Ending balance	\$	1,845

The County entered into an agreement with the City of Hialeah (City) to construct a 10 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 City shall contribute and pay for 50% of the planning, design, construction, and construction management (design and construction) cost for the WTP and the County shall contribute 50% of the design and construction cost for the WTP. In Fall of 2013, the Plant began production capable of 7.5 MGD, with County and City each receiving 50% of the production. In fiscal year 2023, no monies were contributed to the City and the Department incurred \$3.1 million in operating expenses. As of September 30, 2023, the Department contributed approximately \$55.9 million towards the construction of the WTP.

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 because 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 accounts. Restricted assets for fiscal year ended September 30, 2023 is represented in the following table (in thousands):

2023	
\$	347,936
	344,499
	118,993
	52,563
	180,765
	7,892
\$	1,052,648
	\$

6. CAPITAL ASSETS

Capital asset activity during fiscal year 2023 was as follows (in thousands):

	Balance	20	23	Balance	
	9/30/2022	Additions	Deletions	9/30/2023	
Capital assets, not being depreciated/ amortized:					
Land	\$ 80,571	\$ 4,471	\$ (170)	\$ 84,872	
Construction work in progress	1,803,728	610,650	(423,056)	1,991,322	
Total capital assets, not being depreciated / amortized	1,884,299	615,121	(423,226)	2,076,194	
Capital assets, being depreciated / amortized:					
Buildings and building improvements	41,624	—	—	41,624	
Structures and improvements	6,132,107	254,639	(5,740)	6,381,006	
Machinery and Equipment	1,499,047	124,508	(18,578)	1,604,977	
Right-To-Use Lease Assets	—	660	—	660	
Right-To-Use SBITA Assets ¹	900	14,583	—	15,483	
Intangible Asset -C51 Water Rights	—	69,000	—	69,000	
Total capital assets, being depreciated / amortized	7,673,678	463,390	(24,318)	8,112,750	
Less accumulated depreciation / amortization for:					
Buildings and building improvements	(18,150)	(1,043)	_	(19,193)	
Structures and improvements	(2,825,875)	(175,305)	6,889	(2,994,291)	
Machinery and Equipment	(1,063,533)	(64,769)	18,053	(1,110,249)	
Right-To Use Lease Assets	_	(121)	_	(121)	
Right-To-Use SBITA Assets	_	(720)	_	(720)	
Intangible Asset Accum Amort - C51 Water Rights	_	(821)	_	(821)	
Total accumulated depreciation / amortization	(3,907,558)	(242,779)	24,942	(4,125,395)	
Total capital assets, being depreciated / amortized, net	3,766,120	220,611	624	3,987,355	
Total capital assets, net	\$ 5,650,419	\$ 835,732	\$ (422,602)	\$ 6,063,549	

¹ Beginning balance was adjusted to consider proper amounts related to the implementation of GASB Statement No. 96.

7. LEASES

For fiscal year ending September 30, 2023 the Department did not have any lessor leases that met the Department's \$200,000 lease threshold. The Department, however is a lessee for noncancellable leases of multi-functional devices provided by outside suppliers.

The summary of the Departments lease asset activity for the multi-functional devices as of September 30, 2023 is as follows (in thousands):

LEASE ASSETS:

Fiscal Year Ended September 30,	20	23
Beginning Balance:	\$	
Leases initiated during the fiscal year:		660
Less amortization expense:		(121)
Lease assets, net:	\$	539

LEASE LIABILITY:

The following table presents the Department's lease obligation for the multi-functional equipment payable in future years as of September 30, 2023.

Year Ending September 30 (in thousands)	I	Principal	Interest
2024	\$	131	\$ 4
2025		132	3
2026		133	2
2027		135	1
2028		10	_
Total	\$	541	\$ 10

8. SUBSCRIPTION-BASED INFORMATION TECHNOLOGY ARRANGEMENT (SBITA)

The Department has recorded several subscription-based information technology arrangement (SBITA) assets and liabilities as a result of implementing GASB Statement No. 96. The SBITA assets are initially measured at an amount equal to the initial measurement of the related SBITA liability plus any SBITA payments made prior to the subscription term, less SBITA incentives, plus any ancillary charges necessary to place the SBITA into service. The SBITA assets are amortized on a straight-line basis over the life of the related contract.

The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend the asset lives are not capitalized and are expensed as incurred.

The Department monitors changes in circumstances that would require a remeasurement of its SBITA and will do so if certain changes occur that would be expected to significantly affect the amount of the SBITA liability. SBITA assets are recorded with other capital assets and SBITA liabilities are reported with long-term debt on the statement of net position (See Notes 6,9).

The Department has recorded several SBITAs totaling \$15.5 million. The Department has discounted the future minimum payments using its incremental borrowing rate of 3.9 percent.

The summary of the Departments SBITA activity as of September 30, 2023 is as follows (in thousands):

Fiscal Year Ended September 30,	2023
Beginning Balance:	\$ 900
SBITA initiated during the fiscal year:	14,583
Less amortization expense:	 (720)
SBITA assets, net:	\$ 14,763

SBITA LIABILITIES:

Future minimum SBITA payments and the present value of the minimum SBITA payments as of September 30, 2023 are as follows (in thousands):

Year Ending September 30		
(in thousands)	Principal	Interest
2024	\$ 2,157	\$ 502
2025	1,390	451
2026	1,441	399
2027	1,282	350
2028	1,360	303
2029-2033	 7,672	664
Total	\$ 15,302	\$ 2,669

9. 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 50. 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 followed all such covenants and restrictions as of and for the year ended September 30, 2023.

CHANGES IN LONG-TERM LIABILITIES

A summary of long-term liability activity during fiscal year 2023 is presented in the following table (in thousands):

	Outstanding	E	Balance		2023		E	Balance		Due in	
Description	Rate	9	/30/2022	2 Additions		Deletions		9/30/2023		2024	
Dade County Revenue Bonds											
Series 2008A & B	3.25%-5.25%	\$	57,005	\$	_	\$	57,005	\$	_	\$	_
Series 2015	4.00%-5.00%		396,095		_		26,325		369,770		85,985
Series 2017A	4.00%-5.00%		381,355		—				381,355		—
Series 2017B	3.00%-5.00%		544,960		_		3,180		541,780		3,355
Series 2019	5.00%		233,305		_		_		233,305		_
Series 2019B	3.00%-4.00%		663,860		_		_		663,860		_
Series 2019C	2.5%-3.00%		548,090		—		_		548,090		_
Series 2021	3.00%-5.00%		605,600		_				605,600		_
Sub Series 2021	4.00%-5.00%		236,135		—		_		236,135		_
Plus: unamortized premium			379,942		—		16,105		363,837		_
Total revenue bonds		\$4	1,046,347	\$		\$	102,615	\$3	3,943,732	\$	89,340
State Loan Obligations											
State revolving fund	2.56%-4.17%	\$	204,830	\$	144	\$	10,486	\$	194,488	\$	10,378
Total state revolving funds	,	\$	204,830	\$	144	\$	10,486	\$	194,488	\$	10,378
-											,
Notes Payable	0.000/	•		^		•		•	4 0 0 0	•	
WIFIA loan program	2.89%	\$	1,321	\$	39	\$	_	\$	1,360	\$	
Total notes payable		\$	1,321	\$	39	\$		\$	1,360	\$	
Total long-term debt		\$4	1,252,498	\$	183	\$	113,101	\$4	139,580	\$	99,718
Other Liabilities:											
		¢	66 255	¢	7 715	¢	1 061	¢	72 900	¢	12 200
Compensated absences		\$	66,355	\$	7,715	\$	1,261	\$	72,809	\$	13,200
Self-insurance			4,389		672		269		4,792		1,192
Other post-employment benefits			53,466		7,031		2,095		58,402		_
Net pension liability			211,485		43,678				255,163		_
Lease liability					574		33		541		131
SBITA liability ¹			900		14,583		181		15,302		2,157
Other Non-Current Liabilities-											
Restricted			9,098		11,000		3,589		16,509		—
Unrestricted			_		8,550		_		8,550		
Total long-term liabilities		\$4	1,598,191	\$	93,986	\$	120,529	\$4	1,571,648	\$	116,398

¹ Beginning balance was adjusted to consider proper amounts related to the implementation of GASB Statement No. 96.

DEBT SERVICE REQUIREMENTS

As of September 30, 2023, the Department's debt service requirements to maturity for their term were as follows (in thousands):

	Revenu	e Bonds	State	State Loans Notes Payable		Tot	al		
Maturing in Fiscal Year	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Debt Service Requirement
2024	\$ 89,340	\$ 144,643	\$ 10,378	\$ 1,840	\$ —	\$ —	\$ 99,718	\$ 146,483	\$ 246,201
2025	93,735	140,066	11,713	1,776	_	_	105,448	141,842	247,290
2026	98,615	135,258	13,463	1,703	_	_	112,078	136,961	249,039
2027	102,545	130,229	13,627	1,537	_	_	116,172	131,766	247,938
2028	104,425	125,655	13,778	1,385	76	_	118,279	127,040	245,319
2029 - 2033	457,270	573,076	71,394	4,342	236	167	528,900	577,585	1,106,485
2034 - 2038	570,045	464,374	37,122	1,158	209	140	607,376	465,672	1,073,048
2039 - 2043	716,610	339,192	18,064	320	241	107	734,915	339,619	1,074,534
2044 - 2048	892,260	179,253	4,949	22	278	71	897,487	179,346	1,076,833
2049 - 2052	455,050	25,307			320	28	455,370	25,335	480,705
	3,579,895	2,257,053	194,488	14,083	1,360	513	3,775,743	2,271,649	6,047,392
Unamortized Discount & Premium Amounts	363,837	_	_	_	_	_	363,837	_	363,837
Total	\$ 3,943,732	\$ 2,257,053	\$ 194,488	\$ 14,083	\$ 1,360	\$ 513	\$ 4,139,580	\$ 2,271,649	\$ 6,411,229

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

On July 15, 2009, 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 fiscal year 2023 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.25 times the current year's debt service requirements were met in fiscal year

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2008B In July 15, 2008, \$374.6 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2008B were issued to redeem all 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 fiscal year 2023 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.25 times the current year's debt service requirements were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2015 On June 3, 2015, the County issued \$481.2 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2015 to advance refund the \$244.4 million aggregate principal of the Miami-Dade County Revenue Bonds, Series 2007, \$255.7 million aggregate principal of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2008C and pay the costs of issuance.

The Series 2015 Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2027 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.25 times the current year's debt service requirements were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A On December 7, 2017, the County issued \$381.3 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series 2017A The Series 2017A Bonds refunded all outstanding Commercial Paper Notes -Series A-1 and Series B-1, made a deposit to the Reserve Account and paid the costs of issuance of the Series 2017A Bonds.

The Series 2017A Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2047 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.25 times the current year's debt service requirements were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2017B On December 7, 2017, the Department issued \$548.0 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2017B. The Series 2017B Bonds refunded \$567.6 million principal outstanding for the Miami-Dade County, Florida Water and Sewer System Revenue Bonds, Series 2010 and paid the costs of issuance of the Series 2017B Bonds.

The Series 2017B Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2039 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.25 times the current year's debt service requirements were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2019

On January 31, 2019, the Department issued Miami-Dade County Water and Sewer System Revenue Bonds, Series 2019 for \$233.3 million. The Series 2019 Bonds are refunding all of the outstanding Miami-Dade County, Florida Water and Sewer System Commercial Paper Notes, Series A-1 and all of the outstanding Miami-Dade County, Florida Water and Sewer System Commercial Paper Notes, Series B-1, make a deposit to the Reserve Account and pay the costs of issuance of the Series 2019 Bonds.

The Series 2019 Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2020 through the year 2049 with semi-annual interest due on April 1 and October 1 of each year. Net revenues requirements of at least 1.25 times the current year's debt service requirement were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2019B

On November 9, 2019, \$663.8 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series 2019B were issued to refund all of the outstanding Miami-Dade County, Florida Water and Sewer System Commercial Paper Notes, Series A-1 and all of the outstanding Miami-Dade County, Florida Water and Sewer System Commercial Paper Notes, Series B-1 and the costs of issuance of the Series 2019B Bonds.

The Series 2019B Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2020 through the year 2049 with semi-annual interest due on April 1 and October 1 of each year. Net revenues requirements of at least 1.25 times the current year's debt service requirement were met in fiscal year.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2019C On November 9, 2019, the County issued \$548.1 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2019C. The Series 2019C Bonds refunded \$340 million principal outstanding for the Miami-Dade County, Florida Water and Sewer System Revenue Bonds, Series 2013A and all of the \$152.4M outstanding principal amount of Miami-Dade County, Florida Water and Sewer System Revenue Refunding Bonds, Series 2013B, and pay the costs of issuance of the Series 2019C Bonds. The difference between the cash flows required to service the old debt and the new debt is \$52.8 million. The economic gain resulting from the refunding transaction calculated on a present value basis is \$49.5 million.

The Series 2019C Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2020 through the year 2049 with semi-annual interest due on April 1 and October 1 of each year. Net revenues requirements of at least 1.25 times the current year's debt service requirement were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2021

On April 20, 2021, the County issued \$605.6 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series 2021. The Series 2021 Bonds pay the cost of the Series 2021 Project, make a deposit to the Reserve Account, and pay the costs of issuance of the Series 2021 Bonds. The Series 2021 Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2021 through the year 2051 with semi-annual interest due on April 1 and October 1 of each year. Net revenues requirements of at least 1.25 times the current year's debt service requirement were met in fiscal year 2023.

MIAMI-DADE COUNTY WATER AND SEWER SYSTEM SUBORDINATE REVENUE BONDS, SERIES 2021 On July 8, 2021, the County issued \$236.1 million of Miami-Dade County Subordinate Water and Sewer System Revenue Bonds, Series 2021. The proceeds of the Series 2021 Subordinate Bonds are used to pay the costs of the Series 2021 Project and pay the costs of issuance of the Series 2021 Subordinate Bonds. Payment terms are due serially starting in 2021 through 2052 with semi-annual interest due on April 1 and October 1 of each year. Net revenues requirements of at least 1.0 times the current year's debt service requirement were met in fiscal year 2023.

MIAMI-DADE COUNTY REVENUE BONDS- REMEDIES

Upon an event of default as described in the Master Ordinance, a trustee or Bondholder acting for the Holders of all Bonds made by suit, action, mandamus or other judicial proceedings, protect and enforce any and all rights, including the right to the appointment of a receiver, existing under and to the extent permitted by the laws of the State of Florida, or granted and contained in the Master Ordinance, and may enforce and compel the performance of all duties required in the Master Ordinance or by any applicable statutes to be performed by the County or by an officer thereof.

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, 2023, are detailed in the following table (in thousands):

Loan #	Draws	Close Out Date
37788P	\$ 235	09/27/2004
37789A	56	11/15/2006
37789L	109	11/22/2006
377900	75,533	09/05/2014
130200	82	08/08/2016
130201	44	08/08/2016
130230	13,597	Active
130240	14,470	Active
130260	25,868	Active
1302A0	64,494	Active
	\$ 194,488	

Related payments of principal and interest are due through the fiscal year 2045. 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 2023.

Default in payment of principal and interest on any of the loans described above or any future loans could cause an acceleration of the entire amount of such loans.

NOTES PAYABLE

The Department closed on \$99.7 million in WIFIA funding at an interest rate of 2.89% on March 22, 2019 for its Ocean Outfall Reduction and Resiliency Enhancement Project. WIFIA will fund up to 49% of the project estimate on a reimbursement basis, or \$99.7 million of this project's costs, the remainder of which is being funded through the State Revolving Fund Loan Program and Department cash on hand. This WIFIA loan will partially fund projects to meet compliance with the Ocean Outfall Legislation (OOL). As of fiscal year end September 30, 2023, the Department has a notes payable outstanding of approximately \$1.3 million. The first WIFIA payment is due five years after the completion of the project and will be paid semi-annually on April 1 and October 1.

Whenever any event of default has occurred as per the WIFIA funding agreement, the lender is entitled to institute any actions or proceedings at law or in equity for the collection of any sums due and unpaid under the WIFIA Note and may prosecute any such judgment and final decree against the Department and collect in the manner provided by law. Additionally, the WIFIA funding agreement calls for a default rate set as a fluctuating interest rate per annum equal to the sum of the base rate from time to time in effect plus four percent (4%).

The notes are issued for the purpose of providing temporary funding for a portion of the Department's Capital Improvement Program, financing the payment of the principal of and interest on any maturing notes or obligations and paying certain costs of issuance.

10. PAYABLES

Accounts payables and accrued expenses for fiscal year ended September 30, 2023 were as follows (in thousands):

	2023		
Other county funds	\$	23,638	
Vendors		85,281	
Other governments		22,050	
Salaries and benefits		13,709	
Contractors		57,638	
Other		120	
Total payables	\$	202,436	

11. PENSION PLAN

The Department, as an agency of the County, participates in the Florida Retirement System (the FRS). The FRS was created in Chapter 121, Florida Statutes, to provide a defined benefit pension plan for participating public employees. The FRS was amended in 1998 to add the Deferred Retirement Option Program (DROP) under the defined benefit plan and amended in 2000 to provide a defined contribution plan alternative to the defined benefit plan for FRS members effective October 1, 2002. This integrated defined contribution pension plan is the FRS Investment Plan. Chapter 112, Florida Statutes, established the Retiree Health Insurance Subsidy (HIS) Program, a cost-sharing multiple-employer defined benefit pension plan, to assist retired members of any state-administered retirement system in paying the costs of health insurance.

Essentially all regular employees of the Department are eligible to enroll as members of the Stateadministered FRS. Provisions relating to the FRS are established by Chapters 121 and 122, Florida Statutes; Chapter 112, Part IV, Florida Statutes; Chapter 238, Florida Statutes; and FRS Rules, Chapter 60S, Florida Administrative Code; wherein eligibility, contributions, and benefits are defined and described in detail. Such provisions may be amended at any time by further action from the Florida Legislature.

The FRS is a single retirement system administered by the Florida Department of Management Services, Division of Retirement, and consists of the two cost-sharing, multiple-employer defined benefit plans and other nonintegrated programs. An annual comprehensive financial report of the FRS, which includes its financial statements, required supplementary information, actuarial report, and other relevant information, is available from the Florida Department of Management Services' Web site: (<u>http://www.dms.myflorida.com/</u><u>workforce_operations/retirement/publications).</u>

FRS PENSION PLAN DESCRIPTION

The FRS Pension Plan (Plan) is a cost-sharing multiple-employer defined benefit pension plan, with DROP for eligible employees.

Employees enrolled in the Plan prior to July 1, 2011, vest at 6 years of creditable service and employees enrolled in the Plan on or after July 1, 2011, vest at 8 years of creditable service. All vested members enrolled prior to July 1, 2011 are eligible for normal retirement benefits at age 62 or at any age after 30 years of service (except for members classified as special risk who are eligible for normal retirement benefits at age 55 or at any age after 25 years of service). All members enrolled in the Plan on or after July 1, 2011, once vested, are eligible for normal retirement benefits at age 65 or any time after 33 years of creditable service (except for members classified as special risk who are eligible for normal retirement benefits at age 65 or any time after 33 years of creditable service (except for members classified as special risk who are eligible for normal retirement benefits at age 60 or at any age after 30 years of service). Members of the Plan may include up to 4 years of credit for military service toward creditable service.

The Plan also includes an early retirement provision; however, there is a 5 percent benefit reduction for each year a member retires before his or her normal retirement date. The Plan provides retirement, disability, death benefits, and annual cost-of-living adjustments to eligible participants.

DROP, subject to provisions of Section 121.091, Florida Statutes, permits employees eligible for normal retirement under the Plan to defer receipt of monthly benefit payments while continuing employment with an FRS employer. An employee may participate in DROP for a period not to exceed 96 months after electing to participate, except that certain instructional personnel may participate for up to 96 months. During the period of DROP participation, deferred monthly benefits are held in the FRS Trust Fund and accrue interest. The net pension liability does not include amounts for DROP participants, as these members are considered retired and are not accruing additional pension benefits.

BENEFITS PROVIDED

Benefits under the Plan are computed on the basis of age and/or years of service, average final compensation, and service credit. Credit for each year of service is expressed as a percentage of the average final compensation. For members initially enrolled before July 1, 2011, the average final compensation is the average of the five highest fiscal years' earnings; for members initially enrolled on or after July 1, 2011, the average final compensation is the average final compensation is the average of the five highest fiscal years' earnings; for members initially enrolled on or after July 1, 2011, the average final compensation is the average of the eight highest fiscal years' earnings. The total percentage value of the benefit received is determined by calculating the total value of all service, which is based on the retirement class to which the member belonged when the service credit was earned. Members are eligible for in-line-of-duty or regular disability and survivors' benefits.

As provided in Section 121.101, Florida Statutes, if the member is initially enrolled in FRS before July 1, 2011, and all service credit was accrued before July 1, 2011, the annual cost-of-living adjustment is 3 percent per year. If the member is initially enrolled before July 1, 2011, and has service credit on or after July 1, 2011, there is an individually calculated cost-of-living adjustment. The annual cost-of-living adjustment is a proportion of 3 percent determined by dividing the sum of the pre-July 2011 service credit by the total service credit at retirement multiplied by 3 percent. Plan members initially enrolled on or after July 1, 2011, will not have a cost-of-living adjustment after retirement.

CONTRIBUTIONS

The Florida Legislature establishes contribution rates for participating employers and employees. Contributions rates in effect from July 1, 2022 through June 30, 2023 were as follows:

	Effective Ju through Jun	•	Effective July 1, 2023 through June 30, 2024			
	Percentage of Gross Salary Percentage of Gross Sa					
Class	Employee	Employer ¹	Employee	Employer ¹		
FRS, Regular	3.00	11.91	3.00	13.57		
FRS, Elected County Officers	3.00	57.00	3.00	58.68		
FRS, Senior Management Service	3.00	31.57	3.00	34.52		
FRS, Special Risk Regular	3.00	27.83	3.00	32.67		
DROP - Applicable to members from all of the above classes	N/A	18.60	N/A	21.13		

¹ Employer rates include 1.66% for the postemployment health insurance subsidy, and employer rates, other than for DROP participants, include 0.06% for administrative costs.

The Department's contributions for FRS totaled \$24.6 million and employee contributions totaled \$4.9 million for the fiscal year ended September 30, 2023.

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

At September 30, 2023, the Department reported a liability of \$191.5 million for its proportionate share of the Plan's net pension liability. The net pension liability was measured as of June 30, 2023, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2023.

For the fiscal year ended September 30, 2023, the Department recognized pension expense/(income) of \$21.0 million related to the Plan. In addition, the Department reported, deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (in thousands):

Description	 red Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$ 17,984	\$	_	
Change of assumptions	12,484		—	
Net difference between projected and actual earnings on FRS pension plan investments	7,999		_	
Changes in proportion and differences between the Department FRS contributions and proportionate share of contributions	3,348		(841)	
The Department contributions subsequent to	E 000			
measurement date	 5,922			
Total	\$ 47,737	\$	(841)	

For fiscal year ended September 30, 2023, the deferred outflows of resources related to pensions of approximately \$5.9 million, resulting from the Department's contributions to the Plan subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the fiscal year ended September 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

		Deferred					
Fiscal Year Ending September 30,	Outflows/(Inflows), Net						
2024	\$	5,942					
2025		(1,540)					
2026		32,026					
2027		3,572					
2028		974					
Total	\$	40,974					

ACTUARIAL ASSUMPTIONS

The FRS pension actuarial assumptions that determined the total pension liability as of June 30, 2023, were based on the results of an actuarial experience study for the period July 1, 2013 – June 30, 2018.

Inflation	2.40
Salary increases	3.25% average, including inflation
Investment rate of return	6.70% net of pension plan investment expense
Discount rate	6.70%

Mortality rates were based on the Generational PUB-2010 with Projection Scale MP-2018.

LONG-TERM EXPECTED RATE OF RETURN

For fiscal year ended September 30, 2023, the long-term expected rate of return on the Plan investments was not based on historical returns, but instead was based on a capital market economic model. The allocation policy's description of each asset class was used to map the target allocation to the asset classes shown below. Each asset class assumption is based on a consistent set of underlying assumptions and includes an adjustment for the inflation assumption. For fiscal year ended September 30, 2023, the target allocation and best estimates of arithmetic and geometric real rates of return for each major asset class are summarized in the following table:

			Compound	
		Annual	Annual	
	Target	Arithmetic	(Geometric)	Standard
Asset Class	Allocation ¹	Return	Return	Deviation
Cash	1.0%	2.9	2.9	1.1%
Fixed income	19.8%	4.5	4.4	3.4%
Global equity	54.0%	8.7	7.1	18.1%
Real estate	10.3%	7.6	6.6	14.8%
Private equity	11.1%	11.9	8.8	26.3%
Strategic investments	3.8%	6.3	6.1	7.7%
	100.0%			
Assumed Inflation - Mean			2.4%	1.4 %

¹ As outlined in the FRS Pension Plan's investment policy.

DISCOUNT RATE

For fiscal year ended September 30, 2023, the discount rate used to measure the net pension liability of the Plan was 6.70 percent. The Pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return.

SENSITIVITY OF THE DEPARTMENT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

For fiscal year ended September 30, 2023, the following represents the Department's proportionate share of the net pension liability calculated using the discount rate of 6.70 percent; as well as what the Department's proportionate share of the net pension liability would be if it is calculated using a discount rate that is one percentage point lower (5.70 percent) or one percentage point higher (7.70 percent) than the current rate (in thousands):

		1%		Current		1%
	Decrease (5.70%)		C	Discount Rate (6.70%)	Increase (7.70%)	
Miami Dade County's proportionate share of net pension liability allocated to the Department	\$	327,170	\$	191,529	\$	78,048

PENSION PLAN FIDUCIARY NET POSITION

Detailed information about the Plan's fiduciary net position is available in the separately issued FRS Pension Plan and Other State-Administered Systems Annual Comprehensive Financial Report.

DEPARTMENT'S ALLOCATION

The Department's proportionate share of the FRS Plan's net pension liability, deferred outflow of resources and deferred inflow of resources, and pension expense/(income) adjustment for the fiscal year ended September 30, 2023 were allocated as follows (in thousands):

	FLORIDA RETIREMENT SYSTEM (FRS) PENSION									
		Deferred			De	ferred	Р	ension		
	Percent	Ne	t Pension	0	utflow of	Inflow of		Expense		
	Allocation	Liability		Re	sources	Resources		Adjustment		
Water and Sewer 2023	5.94 %	\$	191,529	\$	47,737	\$	(841)	\$	21,092	

THE RETIREE HEALTH INSURANCE SUBSIDY (HIS) PROGRAM PLAN DESCRIPTION

The Retiree Health Insurance Subsidy Program (HIS Plan) is a non-qualified cost-sharing multiple-employer defined benefit pension plan established under Section 112.363, Florida Statutes, and may be amended by the Florida Legislature at any time. The benefit is a monthly payment to assist retirees of the State-administered retirement systems in paying their health insurance costs and is administered by the Division of Retirement within the Florida Department of Management Services.

BENEFITS PROVIDED

For the fiscal year ended September 30, 2023, eligible retirees and surviving beneficiaries received a monthly HIS payment equal to the number of years of creditable service completed at the time of retirement multiplied by \$5, with a minimum HIS payment of \$30 and a maximum HIS payment of \$150 per month, pursuant to Section 112.363, Florida Statutes. To be eligible to receive a HIS Plan benefit, a retiree under a State-administered retirement system must provide proof of health insurance coverage, which may include Medicare.

CONTRIBUTIONS

The HIS Plan is funded by required contributions from FRS participating employers as set by the Florida Legislature. Employer contributions are a percentage of gross compensation for all active FRS members. For the fiscal year ended September 30, 2023, the HIS contribution rate was 1.66%. The County contributed 100 percent of its statutorily required contributions for the current year. The HIS Plan contributions are deposited in a separate trust fund from which payments are authorized. HIS Plan benefits are not

guaranteed and are subject to annual legislative appropriation. In the event the legislative appropriation or if available funds fail to provide full subsidy benefits to all participants, benefits may be reduced or canceled.

For the fiscal year ended September 30, 2023, the Department's contributions to the HIS Plan totaled \$2.7 million.

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

At September 30, 2023, the Department reported a net pension liability of \$63.6 million for its proportionate share of the HIS Plan's net pension liability. The net pension liability was measured as of June 30, 2023, and the total pension liability was determined by an actuarial valuation date as of July 1, 2023.

For the fiscal year ended September 30, 2023, the Department recognized a pension expense of \$23.0 million related to the HIS Plan. In addition, the Department reported, deferred outflows or resources and deferred inflows of resources related to the HIS Plan from the following sources (in thousands):

Description	 ed Outflows esources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$ 932	\$	(149)	
Change of assumptions	1,673		(5,515)	
Net difference between projected and actual earnings on HIS pension plan investments	33		_	
Changes in proportion and differences between the Department HIS contributions and proportionate share of HIS contributions	2,024		(102)	
The Department contributions subsequent to measurement date	720		_	
Total	\$ 5,382	\$	(5,766)	

For fiscal year ended September 30, 2023, the deferred outflows of resources related to pensions of approximately \$720 thousand, resulting from the Department's contributions to the HIS Plan subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the fiscal year ended September 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense (income) as follows (in thousands):

	Deferred
Fiscal Year Ending September 30,	Outflows/(Inflows), Net
2024	\$ 32
2025	160
2026	(112)
2027	(742)
2028	(421)
Thereafter	(21)
Total	\$ (1,104)

ACTUARIAL ASSUMPTIONS

The HIS pension as of July 1, 2023 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement.

Inflation	2.40%
Salary increases	3.25% average, including inflation
Investment rate of return	N/A
Discount rate	3.65%

Mortality rates were based on the Generational PUB-2010 with Projection Scale MP-2018.

The actuarial assumptions used in the June 30, 2023 valuations were based on the results of an actuarial experience study for the period July 1, 2013 through June 30, 2018.

DISCOUNT RATE

For fiscal year ended September 30, 2023, the discount rate used to measure the total pension liability for the HIS Plan was 3.65 percent. In general, the discount rate for calculating the total pension liability is equal to the single rate equivalent to discounting at the long-term expected rate of return for benefit payments prior to the projected depletion date. Because the HIS benefit is essentially funded on a pay-as-you-go basis, the depletion date is considered to be immediate, and the single equivalent discount rate is equal to the municipal bond rate selected by the HIS Plan sponsor. The Bond Buyer General Obligation 20-Bond Municipal Bond Index was adopted as the applicable municipal bond index.

SENSITIVITY OF THE DEPARTMENT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

For fiscal year ended September 30, 2023, the following represents the Department's proportionate share of the net pension liability calculated using the discount rate of 3.65 percent; as well as what the Department's proportionate share of the net pension liability would be if it is calculated using a discount rate that is one percentage point lower (2.65 percent) or one percentage point higher (4.65 percent) than the current rate (in thousands):

	1%			Current	1%		
	Decrease (2.65%)		[Discount Rate (3.65%)	Increase (4.65%)		
Miami Dade County's proportionate share of the net pension liability							
allocated to the Department	\$	72,597	\$	63,634	\$	56,205	

PENSION PLAN FIDUCIARY NET POSITION

Detailed information regarding the HIS Plan's fiduciary net position is available in the separately issued FRS Pension Plan and Other State-Administered Systems Annual Comprehensive Financial Report.

DEPARTMENT'S ALLOCATION

The Department's proportionate share of the HIS Plan's net pension liability, deferred outflow of resources and deferred inflow of resources, and pension expense adjustment for the fiscal year ended September 30, 2023 were allocated as follows (in thousands):

	HIS PLAN									
				Deferred Outflow of		De	eferred	Pe	ension	
	Percent	Ne	t Pension			ow of Inflow of		Expense		
	Allocation	Liability		Resources		Resources		Adjustment		
Water and Sewer 2023	5.94%	\$	63,634	\$	5,382	\$	(5,766)	\$	23,077	

The below table represents the Department's aggregate net pension liability, deferred outflow of resources related to pensions, deferred inflow of resources related to pensions, and the pension expense adjustments for FRS and HIS plans as of the end of the fiscal year.

	FRS & HIS PLAN								
		Net Pension Liability		Deferred Outflow of		Deferred		Pension	
	Percent					In	flow of	Expense	
	Allocation			Re	Resources		Resources		Adjustment
Water and Sewer 2023	5.94%	\$	255,163	\$	53,119	\$	(6,607)	\$	44,169

FRS – DEFINED CONTRIBUTION INVESTMENT PLAN

The Department contributes to the FRS Defined Contribution Investment Plan (Investment Plan). The Investment Plan is administered by the State Board of Administration (SBA) and is reported in the SBA's annual financial statements and in the State of Florida Annual Comprehensive Financial Report.

As provided in Section 121.4501, Florida Statutes, eligible FRS members may elect to participate in the Investment Plan in lieu of the FRS defined benefit plan. Miami-Dade County employees participating in the DROP are not eligible to participate in the Investment Plan. Employer and employee contributions, including amounts contributed to individual member's accounts, are defined by law, but the ultimate benefit depends in part on the performance of investment funds. Benefit terms, including contribution requirements, for the Investment Plan are established and may be amended by the Florida Legislature. The Investment Plan is funded with the same employer and employee contribution rates that are based on salary and membership class (Regular Class, Elected County Officers, etc.), as the FRS Pension Plan. Contributions are directed to individual member accounts, and the individual members allocate contributions and account balances among various approved investment choices. Allocations to the investment member's accounts, as established by Section 121.72, Florida Statutes, are based on a percentage of gross compensation, by class.

For all membership classes, employees are immediately vested in their own contributions and are vested after one year of service for employer contributions and investment earnings. If an accumulated benefit obligation for service credit originally earned under the FRS Pension Plan is transferred to the Investment Plan, the member must have the years of service required for FRS Pension Plan vesting (including the service credit represented by the transferred funds) to be vested for these funds and the earnings on the funds. Non-vested employer contributions are placed in a suspense account for up to five years. If the employee returns to FRS-covered employment within the five-year period, the employee will regain control over their account. If the employee does not return within the five-year period, the employee will forfeit the accumulated account balance. At fiscal year ended September 30, 2023, the costs of administering the Investment Plan, including the FRS Financial Guidance Program, were funded through an employer contribution of 0.06 percent of payroll and by forfeited benefits of Investment Plan members. For fiscal year ended September 30, 2023, the information for forfeitures was unavailable from the SBA; however, management believes that these amounts, if any, would be insignificant to Miami Dade County.

After termination and applying to receive benefits, the member may rollover vested funds to another qualified plan, structure a periodic payment under the Investment Plan, receive a lump-sum distribution, leave the funds invested for future distribution, or any combination of these options. Disability coverage is provided under the Investment Plan if the member becomes permanently and totally disabled. The member must transfer the account balance to the FRS Trust Fund when approved for disability retirement to receive guaranteed lifetime monthly benefits under the FRS Pension Plan.

For the fiscal year ended September 30, 2023, the Department's Investment Plan pension contributions totaled \$3.9 million.

12. 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 fiscal 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 actuarial 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 depends 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 2023 and 2022 were as follows (in thousands):

	 2023	 2022
Balance at beginning of year	\$ 4,389	\$ 4,331
Claims and changes in estimates	1,609	58
Less: payments	 (1,206)	 —
Balance at end of year	\$ 4,792	\$ 4,389

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 maintained a liability in the amount of \$4.7 million at September 30, 2023 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 \$6 million as of September 30, 2023.

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 which covers up to \$200,000,000 per occurrence for most perils. The Department also has selected properties covered under the National Flood Insurance Program (NFIP) and supplements the NFIP with excess flood policies. The named windstorm deductible is \$35,000,000 and the deductible for flood insurance is \$1,000,000.

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.

13. CAPITAL CONTRIBUTIONS

Capital Contributions during fiscal year 2023 are presented as follows (in thousands):

	 2023
Contributed facilities:	
Developers	\$ 29,563
Contributions - GOB	8,361
Contributions- OJUS	 2,865
Total additions	\$ 40,789

14. 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 fiscal year ended September 30, 2023 (in thousands):

	 2023
General Fund	\$ 25,863
Other County Departments	54,515
Regulatory	65,331
Information Technology	20,830
Internal Services Department	21,239
Solid Waste	17,232

In addition to the payments, the Department had related payables of \$23.6 million at September 30, 2023. The Department also has receivables from other County departments amounting to \$0.4 Million at September 30, 2023. 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 other transactions with various County entities. These transactions arise from the normal course of business and in connection with the management of ongoing projects.

15. COMMITMENTS AND CONTINGENCIES

CONSTRUCTION

For fiscal year ended September 30, 2023, the Department had contractual commitments of \$1.268 billion.

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 significantly affect the financial position of the Department or its ability to conduct its business.

FEDERAL AND STATE GRANTS

Federal and state grant awards are audited under the provisions of the Single Audit Act to determine that the Department has complied with the terms and conditions of the grant awards. Federal and state grants received are also subject to audit by the grantor agency. It is management's opinion that no significant 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, 2023, the Department had no obligation to rebate and did not record any obligation 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.

16. 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 (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 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 four medical plans as follows:

- AvMed POS
- AvMed HMO High
- AvMed HMO Select
- Jackson First HMO

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. Medical contributions vary based on plan and tier. Retirees pay the full cost of dental coverage. The postretirement medical is currently funded on a pay-as-you go basis. Contributions are required for both retiree and dependent coverage. Retirees contribute a portion of the full active premium equivalent rates for health coverage. The County subsidy is assumed to remain flat. The plan is funded on a pay-as-you-go basis and there are no assets accumulated in a qualifying trust.

The County's contribution is the actual pay-as-you-go postemployment benefit payments less participant contributions. No assets have been segregated and restricted to provide postretirement benefits.

TOTAL OPEB LIABILITY

The Department's total OPEB liability of \$58.4 million was measured as of September 30, 2023 and was determined by an actuarial valuation as of that date.

ACTUAL ASSUMPTIONS AND OTHER INPUTS

The total OPEB liability in the September 30, 2023 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement unless otherwise specified:

Valuation date	September 30, 2022
Measurement date	September 30, 2023
Discount rate	4.09%
Salary increase rate	3.0% per annum
Actuarial cost method	Entry Age Normal based on level percentage of projected salary.
Amortization method	Experience/Assumptions gains and losses are amortized over a close period of 14.4 years starting October 1, 2022, equal to the average remaining service of active and inactive plan members (who have no future service).
Healthcare cost trend rates	Medical/Rx Select 7.0=% and Ultimate 4.0%
Retirees' share of benefit-related costs	22.90%
Mortality rates	Pub-2010, headcount weighted base mortality table, projected generationally using Scale MP-2021, applied on a gender-specific and job class basis (teacher, safety, or general, as applicable).

The discount rate was based on a Bond Buyer 20-Bond GO index.

The actuarial assumptions used in the September 30, 2023 valuation were based on the Florida Retirement System's valuation assumptions as of July 1, 2021 and Miami Dade County's claims experience as of June 2022.

CHANGES IN TOTAL OPEB LIABILITY

Changes in the Department's total OPEB liability for the fiscal year ended September 30, 2023 were as follows (in thousands):

	Total OPEB Liability			
Balance at September 30, 2022	\$	53,466		
Changes for the year:				
Service cost		6,182		
Interest		5,227		
Change in assumptions		(764)		
Difference between expected and actual experience		_		
Benefits payments		(5,709)		
Balance at September 30, 2023	\$	58,402		

The increase in the total OPEB liability is mostly due to changes in actuarial assumptions.

SENSITIVITY OF THE TOTAL OPEB LIABILITY TO CHANGES IN THE DISCOUNT RATE

For fiscal year ended September 30, 2023, the following presents the total OPEB liability of the Department, as well as what the Department's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate (in thousands):

		1%		Current	1%		
	D	ecrease 3.09	Dis	count Rate 4.09	Increase 5.09		
Total OPEB Liability	\$	62,884	\$	58,402	\$	54,308	

SENSITIVITY OF THE TOTAL OPEB LIABILITY TO CHANGES IN THE HEALTHCARE COST TREND RATES

For fiscal year ended September 30, 2023, the following presents the total OPEB liability of the Department, as well as what the Department's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates (in thousands):

	 decrease % initial to 3.0%)	Current Trend (5.0% initial to 4.0%)		 1% increase (6.0% initial to 5.0%)	
Total OPEB Liability	\$ 54,854	\$	58,402	\$ 62,340	

OPEB EXPENSE, DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES TO OPEB

For fiscal year ended September 30, 2023, the Department recognized OPEB expense of \$6.5 million. At September 30, 2023, the Department reported deferred outflow of resources and deferred inflow of resources related to OPEB from the following sources (in thousands):

	Defer	red Outflow	Defe	rred Inflow	
	of R	esources	of Resources		
Differences between expected and actual experience	\$	2,276	\$	(1,527)	
Changes in assumptions / inputs		10,136		(5,945)	
Total	\$	12,412	\$	(7,472)	

Amounts reported as deferred outflow of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (in thousands):

Deferre	ed
Outflows/(Infl	ows), Net
\$	795
	795
	795
	795
	795
	965
\$	4,940

17. SUBSEQUENT EVENTS

On September 21, 2023, the Board of County commissioners adopted County Budget Ordinance Number 23-81 authorizing a 4% rate increase to the Department's retail tiered-based structure that will generate enough revenues to support costs including fiscal requirements related to capital investments. Changes will be effective October 1, 2023. In addition, effective October 1, 2023, the County Budget Ordinance increased the water wholesale rate by \$0.1857 per thousand gallons to \$2.1130 from \$1.9273 and the wastewater wholesale rate by \$0.1992 to \$3.9414 from \$3.7422 per thousand gallons. Wholesale water and wastewater rates per thousand gallons rates are based on cost recovery. These rates will be in effect for FY 2023-24.

Required Supplementary Information

MIAMI-DADE WATER & SEWER DEPARTMENT SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS (Dollars in thousands)

Total OPEB Liability	2023	2022	2021	2020	2019
Changes for the Year:					
Service Cost	\$ 6,182	\$ 16,870	\$ 1,116	\$ 914	\$ 795
Interest	5,227	9,044	584	1,371	1,682
Change of Benefit Terms	(764)	(35,019)	(119)	11,845	6,225
Difference Between Expected and	(,	(,,	(112)	.,	-,
Actual Experience	_	18,109	—	(2,677)	_
Benefits Payments	(5,709)	(14,332)	(1,221)	(2,365)	(2,645)
Net Change in Total OPEB Liability	\$ 4,936	\$ (5,328)	\$ 360	\$ 9,088	\$ 6,056
Total OPEB Liability – Beginning	\$ 53,466	\$ 58,794	\$ 58,434	\$ 49,346	\$ 43,290
Total OPEB Liability – Ending	\$ 58,402	\$ 53,466	\$ 58,794	\$ 58,434	\$ 49,346
Covered – Employee Payroll	\$194,862	\$188,273	\$171,274	\$166,285	\$193,094
Total OPEB Liability as a Percentage of	00.0.0/	00.4.0/	04.0.0/		05.0.04
Covered – Employee Payroll	30.0 %	28.4 %	34.3 %	35.1 %	25.6 %

Changes in Assumptions: Changes in assumptions and other inputs reflect the effects of changes in the discount rate each period. The following are the discount rates used each period:

2023	4.09 %
2022	4.02 %
2021	2.26 %
2020	2.21 %
2019	2.66 %

No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB 75 to pay related benefits. The increase in the total OPEB liability is mostly due to changes in actuarial assumptions and an increase in the discount rate.

Note: Schedule is intended to show information for 10 years. Currently, only data for fiscal years ending September 30, 2018 thru 2023 are available. Additional years will be displayed as they become available.

Required Supplementary Information

MIAMI-DADE WATER & SEWER DEPARTMENT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF THE DEPARTMENT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY FLORIDA RETIREMENT SYSTEM PENSION PLAN

(Dollars in thousands)

JUNE 30th,	2023	2022	2021	2020	2019	2018	2017	2016	2015
Department's proportion of the County's FRS net pension liability	5.94 %	5.76%	5.46%	5.16 %	5.07 %	5.26 %	5.29 %	5.65 %	5.93 %
Department's proportionate share of the County's FRS net pension liability	\$ 191,529	\$ 170,752	\$ 32,340	\$ 177,352	\$ 138,669	\$ 124,066	\$ 121,477	\$111,748	\$ 56,648
Department's covered payroll	\$245,798	\$217,650	\$ 191,779	\$ 193,464	\$ 185,240	\$ 179,491	\$ 168,335	\$ 168,798	\$ 131,903
Department's proportionate share of the County's FRS net pension liability as a percentage of its covered payroll	77.92 %	78.45 %	16.86 %	91.67 %	74.86 %	69.12 %	72.16 %	66.20 %	42.95 %
FRS Plan fiduciary net position as a percentage of the total pension liability	82.00 %	83.00 %	96.00 %	79.00 %	83.00 %	84.00 %	84.00 %	85.00 %	92.00 %

MIAMI-DADE WATER & SEWER DEPARTMENT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF THE DEPARTMENT'S CONTRIBUTIONS-FLORIDA RETIREMENT SYSTEM PENSION PLAN

(Dollars in thousands)

SEPTEMBER 30th,	2023	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required FRS contribution	\$ 23,605	\$ 19,583	\$ 16,310	\$ 13,596	\$ 12,485	\$ 10,637	\$ 10,691	\$ 10,534	\$ 10,693
FRS contribution in relation to the contractually required contribution	23,605	19,583	16,310	13,596	12,485	10,637	10,691	10,534	10,693
FRS contribution deficiency (excess)	\$	\$	\$	\$	\$	\$	\$	\$	\$
Department's covered payroll	\$242,217	\$218,982	\$201,497	\$192,766	\$186,248	\$183,327	\$169,397	\$174,697	\$141,267
FRS contribution as a percentage of covered payroll	9.75 %	8.94 %	8.09 %	7.05 %	6.70 %	5.80 %	6.31 %	6.03 %	7.57 %

Note: The schedules presented above illustrate the requirements of GASB Statement No. 68. However, until a full 10-year trend is compiled, information for those years for which information is available will be presented.

Required Supplementary Information

MIAMI-DADE WATER & SEWER DEPARTMENT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF THE DEPARTMENT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY HEALTH INSURANCE SUBSIDY PENSION PLAN

(Dollars in thousands)

JUNE 30th,	2023	2022	2021	2020	2019	2018	2017	2016	2015
Department's proportion of the County's HIS net pension liability	5.94 %	5.76%	5.46%	5.16 %	5.07 %	5.26 %	5.29 %	5.65 %	5.93 %
Department's proportionate share of the County's HIS net pension liability	\$ 63,634	\$ 40,733	\$ 43,774	\$ 39,829	\$ 36,069	\$ 35,055	\$ 35,033	\$ 42,010	\$ 37,204
Department's covered payroll	\$170,235	\$170,080	\$196,874	\$154,311	\$148,448	\$143,553	\$134,720	\$134,855	\$164,213
Department's proportionate share of the County's HIS net pension liability as a percentage of its covered payroll	37.38 %	23.95 %	22.23 %	25.81 %	24.30 %	24.42 %	26.00 %	31.15 %	22.66 %
HIS Plan fiduciary net position as a percentage of the total pension liability	4.12 %	4.81 %	3.56 %	3.00 %	2.63 %	2.15 %	1.64 %	0.97 %	0.50 %

MIAMI-DADE WATER & SEWER DEPARTMENT REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF THE DEPARTMENT'S CONTRIBUTIONS-HEALTH INSURANCE SUBSIDY PENSION PLAN (Dollars in thousands)

SEPTEMBER 30th,	2023	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required HIS contribution	\$ 2,701	\$ 2,327	\$ 2,098	\$ 1,880	\$ 1,790	\$ 1,725	\$ 1,734	\$ 1,770	\$ 1,394
HIS contribution in relation to the contractually required contribution	2,701	2,327	2,098	1,880	1,790	1,725	1,734	1,770	1,394
HIS contribution deficiency (excess)	\$	\$	\$	\$	\$	\$	\$	\$	\$
Department's covered payroll	\$183,887	\$170,235	\$157,567	\$153,512	\$148,970	\$146,648	\$135,685	\$139,403	\$162,174
HIS contribution as a percentage of covered payroll	1.47 %	1.37 %	1.33 %	1.22 %	1.20 %	1.18 %	1.28 %	1.27 %	0.86 %

Note: The schedules presented above illustrate the requirements of GASB Statement No. 68. However, until a full 10-year trend is compiled, information for those years for which information is available will be presented.

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 SCHEDULE OF NET POSITION

	September 30,	2023
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents		\$ 71,858
Investments		59,639
Accounts receivable		
(net of allowance for uncollectible accounts of \$25.5 million)		91,256
Inventory of materials and supplies		28,539
Other current assets		1,845
Restricted cash and cash equivalents		55,429
Total current assets		308,566
NONCURRENT RESTRICTED ASSETS:		
Restricted cash and cash equivalents		115
Investments		397,614
Long-term receivable		2,096
Total restricted assets		399,825
CAPITAL ASSETS:		
Land		28,312
Construction work in progress		204,199
Building and building improvements		20,812
Structures and improvements		2,435,917
Equipment		459,730
Intangible lease asset-equipment		264
SBITA's		6,193
Intangible assets- C51 Water Rights		69,000
Less accumulated depreciation		(1,446,455)
Less accumulated amortization		(1,157)
Total capital assets		1,776,815
Total noncurrent assets		2,176,640
Total assets		2,485,206
DEFERRED OUTFLOWS OF RESOURCES:		
Loss on refundings		32,845
Outflow related to pension		24,691
Outflow related to post-employment benefits		12,412
Total deferred outflows of resources		69,948
Total assets and deferred outflows of resources		\$ 2,555,154

(Continued)

Water System SCHEDULE OF NET POSITION

September 30,	2023
(Continued)	(In thousands)
LIABILITIES	
CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSETS):	
Accounts payable and accrued expenses	\$ 88,310
Customer and developer deposits	12,335
Current portion of lease/SBITA liability	916
Liability for compensated absences	2,226
Other liabilities	777
Total current liabilities (payable from unrestricted current assets)	104,564
CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):	
Accounts payable and accrued expenses	16,415
Retainage payable	3,662
Current portion of long-term debt	17,780
Accrued interest payable	16,380
Liability for self insurance	1,192
Total current liabilities (payable from restricted current assets)	55,429
Total current liabilities	159,993
NONCURRENT LIABILITIES:	
Revenue bonds payable, net	852,827
State loan obligations, net	37,203
Liability for self-insurance	3,600
Liability for compensated absences	24,968
Liability for post-employment benefits	58,402
Net pension liability	119,516
Lease/SBITA liability	5,422
Unearned revenues (LIHWAP)	8,550
Total noncurrent liabilities	1,110,488
Total liabilities	1,270,481
DEFERRED INFLOWS OF RESOURCES:	
Inflow related to pension	4,009
Inflow related to post-employment benefits	7,472
Total deferred inflows of resources	11,481
Total liabilities and deferred inflows of resources	1,281,962
NET POSITION	
Net investment in capital assets	938,491
Restricted for:	
Capital projects	166,900
Debt service	66,076
Unrestricted	101,725
Total net position	1,273,192
Total liabilities, deferred inflows of resources and net position	\$ 2,555,154

Water System SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the fiscal year ended September 30,		2023
	(In	thousands)
OPERATING REVENUES:		
Retail	\$	368,375
Wholesale		41,475
Other revenues		20,626
Total operating revenues		430,476
OPERATING AND MAINTENANCE EXPENSES:		
Source of supply		17,140
Power and pumping		2,212
Treatment		90,212
Transmission and distribution		49,186
Customer accounting		(2,068)
Customer service		16,153
General and administrative		71,369
Total operating and maintenance expenses		244,204
Operating income before depreciation/amortization		186,272
DEPRECIATION & AMORTIZATION EXPENSE		81,415
Operating income		104,857
NON-OPERATING REVENUES (EXPENSES):		
Investment income		27,478
Interest expense		(29,791)
Amortization of issuance costs		(1,718)
Operating disaster revenue		1,541
Customer connection fees		7,783
Other revenues		1,381
Other expenses		(998)
Income before contributions and transfers		110,533
Capital contributions		20,613
Transfer (to) Wastewater System		(35,708)
Increase in net position		95,438
Net position at beginning of year		1,177,754
Net position at end of year	\$	1,273,192

Water System SCHEDULE OF CASH FLOWS

For the fiscal year ended September 30,		2023
	(In	thousands)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash received from customers	\$	462,503
Cash paid to suppliers for goods and services		(67,224)
Cash paid to employees for services		(106,003)
Transfer to Wastewater System		(35,708)
Net cash provided by operating activities		253,568
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Third party Meter installation and replacement costs		(2,500)
Long Term Receivable		404
Net cash used by non-capital and financing activities		(2,096)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Principal payments - bond and loans		(18,264)
Principal payments - Lease/SBITA		(120)
Bond premium and issue costs		(10)
Interest paid		(32,932)
Acquisition and construction of capital assets		(171,543)
Net cash used by capital and related financing activities		(222,869)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investment securities		(5,609,081)
Proceeds from sale and maturity of investment securities		5,526,767
Interest on investments		18,708
Net cash used by investing activities		(63,606)
Net decrease in cash and cash equivalents		(35,005)
Cash and cash equivalents at beginning of year		162,407
Cash and cash equivalents at end of year	\$	127,402

Water System SCHEDULE OF CASH FLOWS

(Continued) (In thousands) RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES: \$ 104,857 Operating income \$ 104,857 Adjustments to recordle operating income to net cash provided by operating activities: 81,416 Depreciation and amortization 81,416 Provision for uncollectible accounts (7,098) Non-operating other, net 21,802 Transfer to Wastewater System (35,709) (Increase) decrease in assets and deferred outflows: Accounts Receivable 22,352 Inventory of materials and supplies (3,315) Contracts/Grants Receivable 227 Deferred outflows related to pension and OPEB 1,634 Increase (decrease) in liabilities and delerred inflows: (1,257) Accounts payable and accrued expenses 56,026 Customer and developer deposits (1,257) Accrued interest payable (3343) Liability for other post-employment benefits 4,938 Liability for other post-employment benefits	For the fiscal year ended September 30,		2023
OPERATING ACTIVITIES: \$ 104,857 Adjustments to reconcile operating income to net cash provided by operating activities: 81,416 Provision for uncollectible accounts (7,098) Non-operating dither, net 21,802 Transfer to Wastewater System (35,708) (Increase) decrease in assets and deferred outflows: 22,352 Accounts Receivable 22,352 Inventory of materials and supplies (3,315) Contracts/Grants Receivable 227 Deferred outflows related to pension and OPEB 1,634 Increase (decrease) in liabilities and deferred inflows: 4ccounts payable and accrued expenses 56,026 Customer and developer deposits (1,257) 4,338 (1,386) Liability for compensated absences 2,452 (1,433) Liability for other post-employment benefits 4,936 Liability for self-insurance 403 Net pension liability 19,655 253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES \$ 253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES \$ 253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES \$ 253,568 \$ 71,858 Restricted unrent cash and cash equivalents \$ 71,858 <th>(Continued)</th> <th>(Ir</th> <th>n thousands)</th>	(Continued)	(Ir	n thousands)
Adjustments to reconcile operating income to net cash provided by operating activities: Bepreciation and amortization 81,416 Provision for uncollectible accounts (7,098) Non-operating other, net 21,802 Transfer to Wastewater System (35,708) (Increase) decrease in assets and deferred outflows: (3,315) Accounts Receivable 22,352 Inventory of materials and supplies (3,315) Contracts/Grants Receivable 227 Deferred outflows related to pension and OPEB 1,634 Increase (decrease) in liabilities and deferred inflows: 4 Accounts payable and accrued expenses 56,026 Customer and developer deposits (1,257) Accrued interest payable (343) Liability for compensated absences 2,452 Other liabilities (1,386) Liability for self-insurance 403 Net pension liability 19,655 Deferred inflows related to pension and OPEB (576) Net cash provided by operating activities \$ NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES \$ Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023. <td></td> <td></td> <td></td>			
provided by operating activities: Depreciation and amortization 81,416 Provision for uncollectible accounts (7,098) Non-operating other, net 21,802 Transfer to Wastewater System (35,708) (Increase) decrease in assets and deferred outflows: Accounts Receivable 22,352 Inventory of materials and supplies (3,315) Contracts/Grants Receivable 227 Deferred outflows related to pension and OPEB 1,634 Increase (decrease) in liabilities and deferred inflows: Accounts payable and accrued expenses 56,026 Customer and developer deposits (1,257) Accrued interest payable and accrued expenses 2,452 Other liability for other post-employment benefits 4,936 Liability for other post-employment benefits 4,936 Liability for other post-employment benefits 4,936 Liability for self-insurance 403 Net pension liability Net cash provided by operating activities \$253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023. The clases (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. The SBITA (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents \$5,429 Restricted noncurrent cash and cash equivalents 115	Operating income	\$	104,857
Depreciation and amortization81,416Provision for uncollectible accounts(7,098)Non-operating other, net21,802Transfer to Wastewater System(35,708)(Increase) decrease in assets and deferred outflows:22,352Accounts Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:4Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The change in the fair value of investments was a \$5.1 million in fiscal year 2023.The clase (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEARUnrestricted current cash and cash equivalents\$\$71,858Restricted current cash and cash equivalents\$5,429Restricted current cash an	Adjustments to reconcile operating income to net cash		
Provision for uncollectible accounts(7,098)Non-operating other, net21,802Transfer to Wastewater System(35,708)(Increase) decrease in assets and deferred outflows:22,352Accounts Receivable22,352Inventory of materials and supplies(3,315)Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:(1,257)Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other Inabilities(13,886)Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEARUnrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents\$ 55,429Restricted current cash and cash equivalents\$ 55,429Restrict			
Non-operating other, net 21,802 Transfer to Wastewater System (35,708) (Increase) decrease in assets and deferred outflows: 22,352 Accounts Receivable 22,352 Inventory of materials and supplies (3,315) Contracts/Grants Receivable 227 Deferred outflows related to pension and OPEB 1,634 Increase (decrease) in liabilities and deferred inflows: 26,026 Accounts payable and accrued expenses 56,026 Customer and developer deposits (1,257) Accrued interest payable (343) Liability for other post-employment benefits 4,936 Liability for self-insurance 403 Net pension liability 19,655 Deferred inflows related to pension and OPEB (576) Net cash provided by operating activities \$ 253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES \$ 253,568 NONCASH Investments was a \$5.1 million increase in fiscal year 2023. The Lease (right-of-u	•		
Transfer to Wastewater System(35,708)(Increase) decrease in assets and deferred outflows:22,352Accounts Receivable22,352Inventory of materials and supplies(3,315)Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:4,020Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEARUnrestricted current cash and cash equivalents\$S 71,858Restricted current cash and cash equivalents\$S 71,858			· · ·
(Increase) decrease in assets and deferred outflows:22,352Accounts Receivable22,352Inventory of materials and supplies(3,315)Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:1,634Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$2.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$2.1 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents51,249			
Accounts Receivable22,352Inventory of materials and supplies(3,315)Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:(1,257)Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.\$The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.\$The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.\$RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$Munestricted current cash and cash equivalents\$\$71,858Restricted oncurrent cash and cash equivalents\$\$55,429Restricted noncurrent cash and cash equivalents\$	•		(35,708)
Inventory of materials and supplies(3,315)Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:1,634Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(1,3886)Liability for soft-employment benefits4,936Liability for soft-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.\$The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.\$The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.\$RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$Settricted noncurrent cash and cash equivalents\$Settr			
Contracts/Grants Receivable227Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:1,634Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents\$ 115			
Deferred outflows related to pension and OPEB1,634Increase (decrease) in liabilities and deferred inflows:56,026Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents\$ 51,429Net115			· · ·
Increase (decrease) in liabilities and deferred inflows:Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$64 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents\$ 71,858Restricted noncurrent cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents51,429			
Accounts payable and accrued expenses56,026Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted current cash and cash equivalents\$ 71,858Restricted noncurrent cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents115			1,634
Customer and developer deposits(1,257)Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted current cash and cash equivalents\$ 71,858Restricted noncurrent cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 55,429Restricted noncurrent cash and cash equivalents115			50.000
Accrued interest payable(343)Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 71,858 55,429 115			
Liability for compensated absences2,452Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 71,858 55,429 115			· · ·
Other liabilities(13,886)Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents Restricted noncurrent cash and cash equivalents 115			· · ·
Liability for other post-employment benefits4,936Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 71,858 55,429 115			
Liability for self-insurance403Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents Restricted noncurrent cash and cash equivalents (55,429) Restricted noncurrent cash and cash equivalents (115)			, ,
Net pension liability19,655Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 71,858Restricted noncurrent cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 115			,
Deferred inflows related to pension and OPEB(576)Net cash provided by operating activities\$ 253,568NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIESProperty, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted current cash and cash equivalents\$ 71,858 S5,429 Restricted noncurrent cash and cash equivalents\$ 115			
Net cash provided by operating activities \$ 253,568 NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023. The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023. Image: The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. The Lease (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023. Image: The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023. RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR \$ 71,858 Unrestricted current cash and cash equivalents \$ 55,429 Restricted noncurrent cash and cash equivalents 115			
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023. The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023. The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023. RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents \$ 71,858 Restricted noncurrent cash and cash equivalents \$ 55,429 Restricted noncurrent cash and cash equivalents 115			(010)
Property, plant and equipment contributions were received in amounts of \$20.6 million in fiscal year 2023.The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023.The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents\$ 71,858 55,429 115	Net cash provided by operating activities	\$	253,568
fiscal year 2023. The change in the fair value of investments was a \$5.1 million increase in fiscal year 2023. The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023. <i>RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR</i> Unrestricted current cash and cash equivalents \$71,858 Restricted current cash and cash equivalents 55,429 Restricted noncurrent cash and cash equivalents 115	NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES		
2023. The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023. The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023. RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR Unrestricted current cash and cash equivalents Restricted current cash and cash equivalents Restricted noncurrent cash and cash equivalents 115			
The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEARUnrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents55,429Restricted noncurrent cash and cash equivalents115			
RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEARUnrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents55,429Restricted noncurrent cash and cash equivalents115	The Lease (right-of-use asset) initiation amount was \$264 thousand in fiscal year 2023.		
Unrestricted current cash and cash equivalents\$ 71,858Restricted current cash and cash equivalents55,429Restricted noncurrent cash and cash equivalents115	The SBITA (right-of-use asset) initiation amount was \$6.2 million in fiscal year 2023.		
Restricted current cash and cash equivalents55,429Restricted noncurrent cash and cash equivalents115	RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR		
Restricted current cash and cash equivalents55,429Restricted noncurrent cash and cash equivalents115	Unrestricted current cash and cash equivalents	\$	71,858
	Restricted current cash and cash equivalents		55,429
Total cash and cash equivalents at end of year\$127,402	Restricted noncurrent cash and cash equivalents		115
	Total cash and cash equivalents at end of year	\$	127,402

Water System SCHEDULE OF OPERATING AND MAINTENANCE EXPENSES

Budget and Actual For the fiscal year ended September 30, 2023 (In thousands)

	Budget	Actuals	Variance under/(over)
Source of supply	\$ 18,746	\$ 17,140	\$ 1,606
Power and pumping	2,178	2,212	(34)
Treatment	84,071	90,212	(6,141)
Transmission and distribution	47,212	49,186	(1,974)
Customer accounting	(1,997)	(2,068)	71
Customer service	16,161	16,153	8
General and administrative	57,936	71,369	(13,433)
Totals	\$ 224,307	\$ 244,204	\$ (19,897)

Wastewater System SCHEDULE OF NET POSITION

	September 30,	2023
		(In thousands)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents		\$ 13,939
Investments		69,046
Accounts receivable		
(net of allowance for uncollectible accounts of \$26.6 million)		128,458
Inventory of materials and supplies		26,125
Restricted cash and cash equivalents		222,376
Total current assets		459,944
NONCURRENT RESTRICTED ASSETS:		
Restricted cash and cash equivalents		40,880
Investments		334,138
Total restricted assets		375,018
CAPITAL ASSETS:		
Land		56,560
Construction work in progress		1,787,123
Building and building improvements		20,812
Structures and improvements		3,945,089
Equipment		1,145,247
Intangible lease asset-equipment		396
SBITA's		9,290
Less accumulated depreciation		(2,677,278)
Less accumulated amortization		(505)
Total capital assets		4,286,734
Total noncurrent assets		4,661,752
Total assets		5,121,696
DEFERRED OUTFLOWS OF RESOURCES:		
Loss on refundings		97,525
Outflow related to pension		28,428
Total deferred outflows of resources		125,953
Total assets and deferred outflows of resources		\$ 5,247,649
(Continued)		

(Continued)

Wastewater System SCHEDULE OF NET POSITION

Septembe	er 30,	2023
(Continued)		(In thousands)
LIABILITIES		
CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSE	TS):	
Accounts payable and accrued expenses	\$	52,892
Customer and developer deposits	•	6,626
Current portion of lease/SBITA liability		1,372
Liability for compensated absences		10,974
Other liabilities		362
Total current liabilities (payable from unrestricted current assets)	_	72,226
CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):	
Accounts payable and accrued expenses		44,819
Retainage payable		37,261
Current portion of long-term debt		81,938
Accrued interest payable		58,358
Total current liabilities (payable from restricted current assets)	_	222,376
Total current liabilities		294,602
NONCURRENT LIABILITIES:		
Revenue bonds payable, net		3,001,565
State loan obligations, net		146,907
Notes Payable		1,360
Liability for compensated absences		34,641
Net pension liability		135,647
Other Non-Current Liabilities - Restricted		16,509
Lease/SBITA liability		8,133
Total noncurrent liabilities	_	3,344,762
Total liabilities		3,639,364
DEFERRED INFLOWS OF RESOURCES:		
Inflow related to pension		2,598
Total deferred inflows of resources	_	2,598
Total liabilities and deferred inflows of resources		3,641,962
NET POSITION		
Net investment in capital assets		1,181,931
Restricted for:		
Capital projects		159,090
Debt service		197,255
Unrestricted		67,411
Total net position		1,605,687
Total liabilities, deferred Inflows of resources and net position	\$	5,247,649

Wastewater System SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the fiscal year ended September 30,		2023		
	(In	thousands)		
OPERATING REVENUES:				
Retail	\$	379,628		
Wholesale		124,315		
Other revenues		19,993		
Total operating revenues		523,936		
OPERATING AND MAINTENANCE EXPENSES:				
Collection system		39,252		
Pumping		64,514		
Treatment		137,878		
Customer accounting		(3,586)		
Customer service		12,691		
General and administrative		87,205		
Total operating and maintenance expenses		337,954		
Operating income before depreciation/amortization		185,982		
DEPRECIATION & AMORTIZATION EXPENSE		160,215		
Operating income		25,767		
NON-OPERATING REVENUES (EXPENSES):				
Investment income		33,447		
Interest expense		(103,790)		
Amortization of issuance costs		(5,905)		
Customer connection fees		30,946		
Other revenues		2,189		
Other expenses		(1,845)		
Income (loss) before contributions and transfers		(19,191)		
Capital contributions		20,176		
Transfer from Water System		35,708		
Increase in net position		36,693		
Net position at beginning of year		1,568,994		
Net position at end of year	\$	1,605,687		

Wastewater System SCHEDULE OF CASH FLOWS

For the fiscal year ended September 30,		2023		
	(In	thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES:				
Cash received from customers	\$	552,536		
Cash paid to suppliers for goods and services		(166,552)		
Cash paid to employees for services		(153,001)		
Transfer from Water System		35,708		
Net cash provided by operating activities		268,691		
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:				
Proceeds from bond issues, loan agreements and notes		182		
Principal payments - bond and loans		(78,732)		
Principal payments - Lease/SBITA		(180)		
Bond premium and issue costs		(10)		
Interest paid		(118,900)		
Acquisition and construction of capital assets		(406,426)		
Net cash used by capital and related financing activities		(604,066)		
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchase of investment securities		3,989,201		
Proceeds from sale and maturity of investment securities		(3,928,818)		
Interest on investments		247,463		
Net cash provided by investing activities		307,846		
Net decrease in cash and cash equivalents		(27,529)		
Cash and cash equivalents at beginning of year		304,724		
Cash and cash equivalents at end of year	\$	277,195		

Wastewater System SCHEDULE OF CASH FLOWS

For the fiscal year ended September 30,		2023
(Continued)	(In thousands)
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$	25,767
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization		160,214
Provision for uncollectible accounts		(7,538)
Non-operating other, net		44,958
Transfer from Water System		35,707
(Increase) decrease in assets and deferred outflows:		
Accounts Receivable		(4,010)
Inventory of materials and supplies		(1,355)
Deferred outflows related to pension and OPEB		894
Increase (decrease) in liabilities and deferred inflows:		
Accounts payable and accrued expenses		3,057
Customer and developer deposits		(525)
Accrued interest payable		(1,805)
Liability for compensated absences		4,001
Other liabilities		(14,072)
Net pension liability		24,023
Deferred Inflows related to pension and OPEB		(625)
Net cash provided by operating activities	\$	268,691
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES		
Property, plant and equipment contributions were received in amounts of \$20.2 million in fiscal year 2023.		
The change in the fair value of investments was a \$12.2 million increase in fiscal year 2023.		
The Lease (right-of-use asset) initiation amount was \$396 thousand in fiscal year 2023.		
The SBITA (right-of-use asset) initiation amount was \$9.2 million in fiscal year 2023.		
RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR		
Unrestricted current cash and cash equivalents	\$	13,939
Restricted current cash and cash equivalents		222,376
Restricted noncurrent cash and cash equivalents		40,880
Total cash and cash equivalents at end of year	\$	277,195

Wastewater System SCHEDULE OF OPERATING AND MAINTENANCE EXPENSES

Budget and Actual For the fiscal year ended September 30, 2023 (In thousands)

Variance Budget Actuals under/(over) \$ Collection system 37,230 \$ 39,252 \$ (2,022) Pumping 57,217 64,514 (7,297) 137,878 Treatment 116,725 (21, 153)Customer accounting (3,176) 410 (3,586)Customer service 12,191 12,691 (500) General and administrative 70,810 87,205 (16, 395)Totals \$ 290,997 337,954 \$ (46, 957)\$

(This page intentionally left blank.)

Statistical Section

Statistical Section

This part of the Department's annual comprehensive financial 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 87-90, 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 91-93, contain information to help the reader assess the factors affecting the Department's ability to generate revenue.

Debt Capacity

These schedules, found on pages 94-96, 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 97-102, 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 103-105, 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)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
COMBINED WATER AND WASTEWATER SYSTEMS:										
Net investment in capital assets	\$2,120,422	\$1,841,503	\$1,967,212	\$1,967,658	\$1,962,557	\$1,941,144	\$1,851,041	\$1,730,528	\$1,590,653	\$1,542,930
Restricted	589,321	745,174	564,710	491,735	419,134	342,400	356,540	330,257	340,066	321,122
Unrestricted	169,136	160,071	167,838	192,058	218,794	237,744	260,899	266,833	266,597	355,635
Total net position	\$2,878,879	\$2,746,748	\$2,699,760	\$2,651,451	\$2,600,485	\$2,521,288	\$2,468,480	\$2,327,618	\$2,197,316	\$2,219,687
WATER SYSTEM:										
Net investment in capital assets	\$ 938,491	\$ 834,166	\$ 851,796	\$ 931,597	\$ 989,270	\$ 986,573	\$ 975,646	\$ 965,055	\$1,013,229	\$ 988,585
Restricted	232,976	238,014	225,148	210,526	141,881	108,344	111,646	80,115	80,841	93,302
Unrestricted	101,725	105,574	88,089	84,910	108,306	123,265	139,835	137,622	146,403	189,084
Total net position	\$1,273,192	\$1,177,754	\$1,165,033	\$1,227,033	\$1,239,457	\$1,218,182	\$1,227,127	\$1,182,792	\$1,240,473	\$1,270,971
WASTEWATER SYSTEM:										
Net investment in capital assets	\$1,181,931	\$1,007,337	\$1,115,416	\$1,036,061	\$ 973,287	\$ 954,571	\$ 875,395	\$ 765,473	\$ 577,424	\$ 554,345
Restricted	356,345	507,160	339,562	281,209	277,253	234,056	244,894	250,142	259,225	227,820
Unrestricted	67,411	54,497	79,749	107,148	110,488	114,479	121,064	129,211	120,194	166,551
Total net position	\$1,605,687	\$1,568,994	\$1,534,727	\$1,424,418	\$1,361,028	\$1,303,106	\$1,241,353	\$1,144,826	\$ 956,843	\$ 948,716

Combined Water and Wastewater Systems schedule of revenues and expenses – LAST TEN FISCAL YEARS

(In thousands)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES:										
Retail	\$ 748.003	\$ 703,749	\$ 674,875	\$ 627,340	\$ 586,158	\$ 563,839	\$ 554,546	\$ 520.146	\$ 486,201	\$ 465,057
Wholesale	165,790	140,654	132,092	118,383	118,260	117,735	123,854	110,951	98,810	85,771
Other	40,619	26,530	20,158	23,758	30,033	30,275	28,932	28,685	28,305	28,022
Total operating revenues	954,412	870,933	827,125	769,481	734,451	711,849	707,332	659,782	613,316	578,850
Total operating revenues	334,412	070,000	027,123	703,401	754,451	711,043	101,002	000,702	010,010	370,000
OPERATING AND MAINTENANCE	EXPENSES:									
Source of supply	17,140	15,462	14,291	14,179	13,966	9,578	14,193	14,284	10,931	10,788
Collection system	39,252	36,064	36,695	33,169	32,481	34,049	33,457	26,866	27,634	22,500
Pumping	66,727	58,477	55,962	52,228	50,162	45,426	44,519	41,532	39,384	37,355
Treatment	228,090	208,393	178,812	165,021	169,240	163,435	152,734	160,186	156,229	145,513
Transmission and distribution	49,186	44,619	37,825	40,328	39,058	35,783	31,228	30,554	30,892	28,844
Customer accounting and service	23,190	43,183	59,626	49,731	33,422	34,787	34,160	30,239	28,068	23,180
General and administrative	158,574	103,316	93,828	124,023	103,896	100,250	88,239	84,827	75,769	81,662
Total operating and maintenance expense	582,158	509,513	477,038	478,679	442,225	423,308	398,530	388,488	368,907	349,842
Operating income before depreciation/amortization	372,254	361,420	350,087	290,802	292,226	288,541	308,802	271,294	244,409	229,008
DEPRECIATION/AMORTIZATION EXPENSE	241,630	234,800	226,059	206,311	201,173	199,694	187,921	184,424	188,909	183,557
Operating income (loss)	130,624	126,620	124,028	84,491	91,053	88,847	120,881	86,870	55,500	45,451
NON-OPERATING REVENUES (EX	PENSES)									
Investment income (loss)	60,925	(9,349)	1,445	14,559	27,954	1,407	(9,649)	(4,853)	20,557	3,933
Interest expense	(133,581)	(140,947)	(129,755)	(122,239)	(111,875)	(42,861)	(25,978)	(46,369)	(75,728)	(89,678)
Other income	33,374	38,856	14,203	16,207	38,358	16,075	20,499	41,043	36,186	42,670
Income (loss) before contributions and transfers	91,342	15,180	9,921	(6,982)	45,490	63,468	105,753	76,691	36,515	2,376
Capital contributions	40,789	31,808	38,388	57,949	33,707	28,330	35,109	53,611	46,692	35,810
Increase in net position		\$ 46,988	\$ 48,309	\$ 50,967	\$ 79,197		\$ 140,862	\$ 130,302	\$ 83,207	\$ 38,186
norease in her position	\$ 132,131	ψ 1 0,900	ψ 4 0,309	φ 30,907	φ ιθ,197	\$ 91,798	ψ 1 4 0,002	φ 130,302	φ 03,207	ψ 30,100

Water System

SCHEDULE OF REVENUES AND EXPENSES - LAST TEN FISCAL YEARS

(In thousands)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES:										
Retail	\$ 368,375	\$ 346,854	\$ 331,651	\$ 302,360	\$ 277,305	\$ 268,275	\$ 265,636	\$ 247,088	\$ 233,464	\$ 219,880
Wholesale	41.475	38,292	34,682	27.779	34,810	39.310	34,916	28.572	37,008	28,815
Other	20,626	12,729	9,476	11,820	15,937	16,159	15,493	15,383	14,966	14,908
Total operating revenues	430,476	397,875	375,809	341,959	328,052	323,744	316,045	291.043	285,438	263,603
······										
OPERATING AND MAINTENANCE	EXPENSES:									
Source of supply	17,140	15,462	14,291	14,179	13,966	9,578	14,193	14,284	10,931	10,788
Pumping	2,212	2,139	2,106	2,040	2,224	1,927	1,976	1,982	2,054	1,911
Treatment	90,212	83,524	71,767	64,517	68,717	62,707	60,387	68,272	63,921	58,741
Transmission and distribution	49,186	44,619	37,825	40,328	39,058	35,783	31,228	30,554	30,892	28,844
Customer accounting and service	14,085	23,714	31,771	26,719	18,850	19,300	19,066	16,859	15,651	13,025
General and administrative	71,369	46,492	42,207	55,875	46,754	45,077	39,683	37,983	34,078	36,711
Total operating and maintenance expenses	244,204	215,950	199,967	203,658	189,569	174,372	166,533	169,934	157,527	150,020
Operating income before depreciation/amortization	186,272	181,925	175,843	138,301	138,483	149,372	149,512	121,109	127,911	113,583
DEPRECIATION & AMORTIZATION EXPENSE	81,415	83,474	82,330	76,720	73,078	74,858	74,142	72,180	66,642	65,456
Operating income	104,857	98,451	93,513	61,581	65,405	74,514	75,370	48,929	61,269	48,127
NON-OPERATING REVENUES (EX	PENSES):									
Investment income (loss)	27,478	(3,311)	557	6,218	12,535	5	(5,178)	(2,650)	10,127	1,769
Interest expense	(29,791)	(31,634)	(31,598)	(30,133)	(26,497)	(16,158)	(17,434)	(16,290)	(19,169)	(21,731)
Other income Income (loss) before contributions	7,988	13,838	4,541	9,191	7,161	7,161	2,463	11,843	9,812	13,090
and transfers	110,531	77,344	67,013	46,857	58,604	65,522	55,221	41,832	62,039	41,255
Capital contributions Transfer (to) from Wastewater	20,613	15,173	21,995	19,804	21,115	16,895	21,632	28,860	27,918	21,370
System	(35,708)	(79,795)	(151,009)	(79,085)	(58,444)	(71,867)	(32,520)	(128,373)	(67,666)	(80,939)
Increase (decrease) in net position	\$ 95,436	\$ 12,722	(\$62,001)	\$ (12,424)	\$ 21,275	\$ 10,550	\$ 44,333	\$ (57,681)	\$ 22,291	\$ (18,314)

Wastewater System schedule of revenues and expenses – LAST TEN FISCAL YEARS

(In thousands)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES:										
Retail	\$ 379,628	\$ 356,895	\$ 343,224	\$ 324,980	\$ 308,853	\$ 295,564	\$ 288,910	\$ 273,058	\$ 252,737	\$ 245,167
Wholesale	124,315	102,362	97,410	90,604	83,450	78,425	88,938	82,380	61,802	56,956
Other	19,993	13,801	10,682	11,938	14,096	14,116	13,439	13,301	13,339	13,114
Total operating revenues	523,936	473,058	451,316	427,522	406,399	388,105	391,287	368,739	327,878	315,237
OPERATING AND MAINTENANCE	EXPENSES:									
Collection system	39,252	36,064	36,695	33,169	32,481	34,049	33,457	26,866	27,634	22,500
Pumping	64,514	56,337	53,855	50,188	47,938	43,499	42,543	39,549	37,330	35,444
Treatment	137,878	124,869	107,045	100,504	100,523	100,728	92,347	91,915	92,308	86,772
Customer accounting and service	9,105	19,469	27,855	23,012	14,572	15,487	15,094	13,380	12,417	10,155
General and administrative	87,205	56,824	51,623	68,148	57,142	55,173	48,556	46,844	41,691	44,951
Total operating and maintenance expenses	337,954	293,563	277,073	275,021	252,656	248,936	231,997	218,554	211,380	199,822
Operating income before depreciation/amortization	185,982	179,495	174,243	152,501	153,743	139,169	159,290	150,185	116,498	115,415
DEPRECIATION & AMORTIZATION EXPENSE	160,215	151,326	143,729	129,591	128,095	124,836	113,779	112,244	122,267	118,101
Operating income (loss)	25,767	28,169	30,514	22,910	25,648	14,333	45,511	37,941	(5,769)	(2,686)
NON-OPERATING REVENUES (EX	PENSES):									
Investment income (loss)	33,447	(6,038)	888	8,341	15,419	1,402	(4,471)	(2,203)	10,430	2,164
Interest expense	(103,790)	(109,313)	(98,157)	(92,106)	(85,378)	(26,703)	(8,544)	(30,079)	(56,559)	(67,947)
Other income	25,385	25,019	9,662	7,017	31,197	8,914	18,034	29,200	26,374	29,580
Income (loss) before contributions and transfers	(19,191)	(62,163)	(57,093)	(53,838)	(13,114)	(2,054)	50,530	34,859	(25,524)	(38,889)
Capital contributions	20,176	16,635	16,393	38,145	12,592	11,435	13,477	24,751	18,774	14,440
Transfer (to) from Water System	35,708	79,795	151,009	79,085	58,444	71,867	32,520	128,373	67,666	80,939
Increase in net position	\$ 36,693	\$ 34,267	\$ 110,309	\$ 63,392	\$ 57,922	\$ 81,248	\$ 96,527	\$ 187,983	\$ 60,916	\$ 56,490

Water and Wastewater System Rates

LAST TEN FISCAL YEARS

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
WATER RATES:										
Meter Size Rate										
5/8"	\$ 3.49	\$ 3.32	\$ 3.20	\$ 3.20	\$ 3.20	\$ 3.20	\$ 3.20	\$ 3.20	\$ 3.20	\$ 3.20
1"	14.83	14.12	13.62	12.38	12.38	12.38	12.38	11.42	10.77	10.16
1.5"	29.65	28.24	27.24	24.76	24.76	24.76	24.76	22.84	21.55	20.33
2"	47.42	45.16	43.56	39.60	39.60	39.60	39.60	36.53	34.46	32.51
3"	94.86	90.34	87.13	79.21	79.21	79.21	79.21	73.07	68.93	65.03
4"	148.21	141.15	136.14	123.76	123.76	123.76	123.76	114.17	107.71	101.61
6"	296.38	282.27	272.25	247.50	247.50	247.50	247.50	228.32	215.40	203.21
8"	474.23	451.65	435.62	369.02	396.02	396.02	396.02	365.33	344.65	325.14
10"	681.71	649.25	626.21	569.28	569.28	569.28	569.28	525.16	495.43	467.39
12"	1,274.50	1,213.81	1,170.73	1,064.30	1,064.30	1,064.30	1,064.30	981.83	926.25	873.82
14"	2,371.14	2,258.23	2,178.08	1,980.07	1,980.07	1,980.07	1,980.07	1,826.63	1,723.24	1,625.70
16"	3,260.33	3,105.08	2,994.87	2,722.61	2,722.61	2,722.61	2,722.61	2,511.63	2,369.46	2,235.34
Composite rate (revenues/flows)	5.81	5.53	5.28	4.86	4.47	4.30	4.09	3.85	3.66	3.46
WASTEWATER RATES:										
Base rate (per 1,000 gallons)	_	N/A								
Meter Size Rate		14/7	14/7	14/7	14/7			10/7	10/7	
5/8"	\$ 5.50	\$ 5.24	\$ 5.05	\$ 5.05	\$ 5.05	\$ 3.25	\$ 3.25	\$ 3.25	\$ 3.25	\$ 3.25
1"	20.44	19.47	18.78	17.07	17.07	12.57	12.53	11.60	10.94	10.32
1.5"	40.88	38.93	37.55	34.14	34.14	25.14	25.05	23.19	21.88	20.64
2"	65.42	62.30	60.09	54.63	54.63	40.23	40.08	37.11	35.01	33.03
3"	130.80	124.57	120.15	109.23	109.23	80.43	80.14	74.20	70.00	66.04
4"	204.39	194.66	187.75	170.68	170.68	125.68	125.22	115.94	109.38	103.19
6"	408.81	389.34	375.52	341.38	341.38	251.38	250.46	231.90	218.77	206.39
8"	654.08	622.93	600.82	546.20	546.20	402.20	400.72	371.03	350.03	330.22
10"	940.23	895.46	863.68	785.16	785.16	578.16	576.03	533.36	503.17	474.69
12"	1,757.84	1,674.13	1,614.00	1,467.92	1,467.92	1,080.92	1,076.93	997.16	940.72	887.47
14"	3,270.40	3,114.67	3,004.12	2,731.02	2,731.02	2,011.02	2,003.59	1,855.18	1,750.17	1,651.10
16"	4,496.81	4,282.68	4,130.67	3,755.15	3,755.15	2,765.15	2,754.95	2,550.88	2,406.49	2,270.27
Composite rate (revenues/flows)	7.65	7.29	7.01	6.70	6.41	6.10	5.74	5.51	5.16	4.98

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

Water Treatment

LAST TEN FISCAL YEARS

(millions of gallons)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
WATER PUMPED:										
Water treatment plants:										
Alexander Orr, Jr.	63,629	65,187	66,281	67,283	66,620	66,096	66,190	65,968	62,566	60,183
John E. Preston	37,609	39,227	38,102	31,791	30,138	26,555	27,891	26,789	27,044	26,942
Hialeah	15,354	10,522	10,283	14,531	16,939	20,467	20,093	20,142	19,488	19,248
South Dade Water System	2,620	3,599	3,765	3,845	3,790	3,920	3,752	3,921	3,570	2,607
Purchase water	94	116	88	89	99	116	116	192	164	124
Total water pumped	119,306	118,651	118,519	117,539	117,586	117,154	118,042	117,012	112,832	109,104
WATER SOLD:										
Wholesale:										
Miami Beach	8,568	6,351	6,926	7,195	8,109	8,381	8,566	8,249	8,346	7,615
Hialeah	6,140	5,643	6,263	6,146	6,376	6,566	7,040	6,857	6,623	7,285
North Miami	2,758	2,295	2,218	2,318	2,792	3,468	2,313	1,538	2,096	1,693
Opa-Locka	747	757	771	861	998	909	894	993	950	895
Hialeah Gardens	801	731	743	766	764	703	742	768	694	638
Homestead ¹	877	856	888	810	668	723	668	684	520	188
Bal Harbor	457	457	415	454	437	455	487	506	503	407
North Bay Village	371	399	419	423	404	419	435	419	430	405
Medley	501	459	405	403	368	389	378	381	365	470
Bay Harbor Islands	299	329	414	317	319	338	319	291	328	318
Surfside	277	335	337	340	358	386	389	325	326	303
West Miami	364	330	328	347	321	334	344	319	251	278
Indian Creek Village	235	219	167	195	179	154	143	119	134	117
Virginia Gardens	84	83	78	82	86	80	80	84	82	91
North Miami Beach	6	7					83		3	
Total wholesale	22,485	19,251	20,372	20,657	22,179	23,305	22,881	21,533	21,651	20,703
Retail	63,456	62,723	62,860	62,243	62,051	62,421	64,968	64,108	63,783	63,539
Total water sold	85,941	81,974	83,232	82,900	84,230	85,726	87,849	85,641	85,434	84,242
Non-account water	33,365	36,677	35,284	34,632	33,357	31,428	30,193	31,373	27,398	24,862
Non-account water as a percentage of total water pumped Unaccounted for water as a	27.97%	30.91%	29.77%	29.46%	28.37%	26.83%	25.58%	26.81%	24.28%	22.79%
percentage of total water pumped	9.33%	10.83%	8.37%	10.15%	9.18%	5.65%	6.69%	10.10%	8.37%	5.67%

¹ Homestead usage of water is limited to an as needed basis. Their usage is not consistent to that of a wholesale customer.

Wastewater Treatment

LAST TEN FISCAL YEARS

(millions of gallons)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
WASTEWATER PLANT FLOWS:										
North District Plant	39,006	35,499	37,867	37,190	32,998	32,785	34,251	30,734	32,745	34,296
		·								
Central District Plant South District Wastewater	33,244	32,731	32,841	36,495	41,449	40,344	40,000	46,432	40,662	44,044
Treatment Plant	43,104	37,265	37,950	35,735	34,515	36,415	38,207	38,115	33,413	37,382
Total wastewater plant flows	115,354	105,495	108,658	109,420	108,962	109,544	112,458	115,281	106,820	115,722
WASTEWATER TREATED:										
Wholesale:										
Miami Beach	8,459	7,242	7,813	7,694	8,058	8,082	8,054	8,797	8,399	8,312
Hialeah	13,903	11,850	11,705	10,636	8,994	9,144	9,203	8,943	7,169	7,102
North Miami	3,545	3,424	3,679	3,607	3,400	3,544	3,654	3,711	3,722	3,619
Coral Gables	1,344	1,241	1,195	1,443	1,074	906	1,477	1,432	1,231	1,041
Homestead	1,689	1,568	1,311	1,202	1,117	1,106	1,763	1,643	938	1,374
Opa-Locka	899	831	909	876	893	703	702	729	861	1,174
Hialeah Gardens	725	717	761	703	661	679	704	700	757	877
North Miami Beach	1,277	1,097	1,061	1,241	1,258	1,250	580	510	505	499
Medley	568	403	573	602	464	438	456	617	477	644
Florida City	572	488	483	445	449	458	425	458	464	420
North Bay Village	354	331	353	315	322	353	409	457	433	418
West Miami	238	214	196	196	199	184	169	185	147	147
Homestead Air Force Base	63	99	99	85	79	73	86	98	78	79
Total wholesale	33,636	29,505	30,138	29,045	26,968	26,920	27,683	28,280	25,181	25,706
Retail	49,620	48,943	48,937	48,523	48,167	48,492	50,334	49,550	48,998	49,247
Unaccounted for wastewater	32,098	27,047	29,582	31,841	33,827	34,131	34,442	37,450	32,641	40,769
Total wastewater treated	115,354	105,495	108,657	109,409	108,963	109,543	112,459	115,280	106,820	115,722
Unaccounted for wastewater as a percentage of total wastewater treated	27.83%	25.64%	27.23%	29.10%	31.04%	31.16%	30.63%	32.49%	30.56%	35.23%
ANNUAL RAINFALL (inches): ¹	81.29	66.96	73.85	75.49	61.28	73.02	78.33	75.11	47.22	73.70

¹ Source: National Weather Service Forecast Office in Miami for rainfall recorded in inches at Miami International Airport.

Debt Services Coverage

LAST TEN FISCAL YEARS

(In thousands)	2023	2022		2021	_	2020		2019	_	2018	_	2017	_	2016	_	2015	_	2014
SENIOR OBLIGATIONS DEBT SER	VICE COVER	AGE:																
Net operating revenues	\$ 372,253	\$ 361,420	\$	350,086	\$	290,802	\$	292,226	\$	288,540	\$	308,802	\$	271,293	\$	244,597	\$	229,008
Investment earnings 1	30,789	3,784		1,870		10,413		15,355		9,566		3,144		1,823		1,198		1,166
Net transfers from (to) Rate Stabilization Fund	_	_		_		_		_		_		_		_		_		_
Net revenues available for debt		·			-		-		_		_		-		_		_	
service	\$ 403,042	\$ 365,204	\$	351,956	\$	301,215	\$	307,581	\$		\$	311,946	\$	273,116	\$	245,795	\$	230,174
Debt service requirements ²	\$ 225,057	\$ 223,846	\$	202,029	\$	188,003	\$	173,198	\$	164,449	\$	161,194	\$	157,036	\$	153,211	\$	143,622
Actual coverage	1.79	1.63		1.74		1.60		1.78		1.81		1.94		1.74		1.60		1.60
Required coverage	1.25	1.25		1.25		1.25		1.25		1.25		1.25		1.25		1.25		1.25
SUBORDINATE OBLIGATIONS DE Net revenues available for debt	BT SERVICE	COVERAGE:																
service Less: Maximum principal and	\$ 403,042	\$ 365,204	\$	351,956	\$	301,215	\$	307,581	\$	298,106	\$	311,946	\$	273,116	\$	245,795	\$	230,174
interest ³	225,057	225,057		225,057	_	202,029		182,569		171,345	_	161,195	_	161,195	_	161,195	_	163,181
Adjusted net revenues	\$ 177,985	\$ 140,147	\$	126,899	\$	99,186	\$	125,012	\$	126,761	\$	150,751	\$	111,921	\$	84,600	\$	66,993
Debt service requirements 4	\$ 23,038	\$ 23,883	\$	16,910	\$	16,934	\$	15,589	\$	15,822	\$	15,973	\$	16,819	\$	18,081	\$	15,369
Actual coverage	7.73	5.87		7.50		5.86		8.02		8.01		9.44		6.65		4.68		4.36
Required coverage	1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
TOTAL OBLIGATIONS DEBT SERV	ICE COVERA	GE:																
Net revenues available for debt																		
service	403,042	365,204		351,956		301,215		307,581		298,106		311,946		273,116		245,795		230,174
Senior debt service requirements	225,057	223,846		202,029		188,003		173,198		164,449		161,194		157,036		153,211		143,622
Subordinate debt service requirements ⁴	23,038	23,883		16,910		16,934		15,589		15,822		15,973		16,819		18,081		15,369
Total debt service requirements	248,095	247,729		218,939		204,937	_	188,787		180,271		177,167		173,855		171,292		158,991
Actual coverage	1.62	1.47		1.61		1.47		1.63		1.65		1.76		1.57		1.43		1.45
Required coverage	1.10	1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10
STATE REVOLVING FUND LOANS		CE COVERA	GE															
Net revenues available for debt																		
service Less: revenue required for primary	\$ 403,042	\$ 365,204	\$	351,956	\$	301,215	\$	307,581	\$	298,106	\$	311,946	\$	273,116	\$	245,795	\$	230,174
debt service coverage 5	281,321	279,808		252,536	_	235,004		216,498		205,561	_	201,493	_	196,295	_	191,514	_	179,528
Adjusted net revenues	\$ 121,721	\$ 85,397	\$	99,421	\$	66,212	\$	91,083	\$	92,546	\$	110,453	\$	76,821	\$	54,093	\$	50,646
Debt service requirements 6	\$ 12,504	\$ 16,187	\$	16,910	\$	16,934	\$	15,589	\$	15,822	\$	15,973	\$	16,819	\$	18,081	\$	15,369
Actual coverage	9.73	5.28		5.88		3.91		5.84		5.85		6.92		4.57		2.99		-
Required coverage	1.15	1.15		1.15		1.15		1.15		1.15		1.15		1.15		1.15		1.1
SUBORDINATE BONDS DEBT SEF	RVICE COVER	RAGE RATIO:																
Net revenues available for debt service	\$ 403,042																	
Less: revenue required for primary	281,321																	
debt service coverage Adjusted net revenues	121,721	-																
Debt service requirements	10,534																	
Actual coverage	10,534																	
, lotadi sovorugo	11.50																	

WIFIA LOANS DEBT SERVICE COVERAGE RATIO:

1.10

Required coverage

Net revenues available for debt service	\$ 403,042
Less: revenue required for primary debt service coverage	 281,321
Adjusted net revenues	121,721
Debt service requirements	_
Actual coverage	_
Required coverage	1.10

Debt Services Coverage

LAST TEN FISCAL YEARS

(continued)

- ¹ Excludes interest income from Construction Fund
- ² Represents debt service requirements on outstanding Bonds for such fiscal year
- ³ Maximum principal and interest requirements on the Bonds for such fiscal year
- ⁴ Represents debt service requirements on outstanding State Revolving Fund Loans, Subordinate Bonds and WIFIA Loans for such fiscal year.
- ⁵ Represents 125% of primary debt service requirements
- ⁶ Represents debt service requirements on outstanding State Revolving Fund Loans for such fiscal year.

Note: Debt Service requirements are on "Cash" basis.

1. Debt service payments on WIFIA loans are not expected to commence until 2028

Ratio of Outstanding Debt by Types

LAST TEN FISCAL YEARS (IN THOUSANDS)

					Total	
	Revenue		Notes	Commercial	Outstanding	Total Per
Fiscal Year	Bonds	Loans	Payable	Paper ¹	Debt	Customer
2023	\$ 3,943,732	\$ 194,488	\$ 1,360	\$ —	\$ 4,139,580	\$ 4.93
2022	4,046,347	204,830	1,321	—	4,252,498	5.09
2021	4,146,417	197,807	1,284	—	4,345,508	4.18
2020	3,236,961	185,282	1,229	—	3,423,472	3.41
2019	2,548,020	160,430	—	300,000	3,008,450	3.16
2018	2,366,854	156,833	—	200,000	2,723,687	2.90
2017	1,980,348	165,449	—	375,000	2,520,797	2.77
2016	2,053,731	161,272	—	100,000	2,315,003	2.95
2015	2,024,019	164,698	—	—	2,188,717	3.03
2014	2,132,906	175,796	—	—	2,308,702	2.66

1 Financing from Commercial Paper/Line of Credit to provide interim financing for the Department's Capital Improvement Program.

Customer Statistics

LARGEST SYSTEM CUSTOMERS - CURRENT YEAR AND NINE YEARS AGO

	Dolla	r Amount ¹	Percent of System Gross
Name	(In t	housands)	Revenues
WATER SYSTEM:			
City of Miami Beach	\$	15,807	3.8 %
Miami Int'l Airport		12,487	2.9 %
City of Hialeah		11,249	2.8 %
City of North Miami		5,109	1.2 %
FI Dep't of Corrections		2,607	0.6 %
City of Homestead		1,608	0.4 %
FPL Turkey Point		1,578	0.4 %
University of Miami		1,575	0.4 %
City of Hialeah Gardens		1,471	0.4 %
City of Opa-Locka		1,367	0.3 %
WASTEWATER SYSTEM:			
City of Hialeah	\$	51,265	10.0 %
City of Miami Beach		31,767	6.1 %
City of North Miami		13,330	2.5 %
City of Homestead		6,558	1.3 %
City of Coral Gables		5,072	1.0 %
City of North Miami Beach		4,829	0.9 %
Miami Int'l Airport		3,732	0.7 %
City of Opa-Locka		3,377	0.6 %
City of Hialeah Gardens		2,739	0.5 %
FI Dep't of Corrections		2,194	0.4 %

October 2013 - September 2014

	Dolla	r Amount ¹	Percent of System Gross		
Name	(In t	housands)	Revenues		
WATER SYSTEM:					
City of Miami Beach	\$	13,054	5.0 %		
City of Hialeah		12,488	4.7 %		
Dade County Aviation		5,784	2.2 %		
City of North Miami		2,901	1.1 %		
Florida Power & Light Company		1,726	0.7 %		
City of Opa-Locka		1,535	0.6 %		
Hialeah Gardens		1,094	0.4 %		
Medley		806	0.3 %		
Bal Harbour		697	0.3 %		
North Bay Village		694	0.3 %		
WASTEWATER SYSTEM:					
City of Miami Beach	\$	20,317	6.4 %		
City of Hialeah		17,486	5.5 %		
City of North Miami		8,904	2.8 %		
City of Homestead		3,365	1.1 %		
Dade County Aviation		3,073	1.0 %		
City of Opa-Locka		2,874	0.9 %		
City ogf Coral Gables		2,563	0.8 %		
Hialeah Gardens		2,155	0.7 %		
Medley		1,585	0.5 %		
City of North Miami Beach		1,220	0.4 %		

1 Using billed flows in place of net amount

Retail Customer Statistics

NUMBER OF CUSTOMERS AT FISCAL YEAR-END - LAST TEN FISCAL YEARS

	Number of C	Ratio of Wastewater		
Fiscal Year	Water	Wastewater	Customers to Water	
2023	462,214	377,496	81.7 %	
2022	459,962	375,345	81.6 %	
2021	457,286	372,681	81.5 %	
2020	451,509	367,618	81.4 %	
2019	449,985	366,069	81.4 %	
2018	447,209	363,444	81.3 %	
2017	443,615	361,055	81.4 %	
2016	441,059	357,882	81.1 %	
2015	436,862	354,006	81.0 %	
2014	432,315	349,778	80.9 %	

Population MIAMI-DADE COUNTY, FLORIDA – LAST TEN FISCAL YEARS

	Annual Resident		
Fiscal Year	Population	Increase (Decrease)	Percent Change
2023 ¹	2,763,366	5,774	0.2%
2022	2,757,592	25,653	0.9%
2021	2,731,939	(91,364)	(3.2)%
2020	2,823,303	11,173	0.4%
2019	2,812,130	32,808	1.2%
2018	2,779,322	36,227	1.3%
2017	2,743,095	46,742	1.7%
2016	2,696,353	42,419	1.6%
2015	2,653,934	67,644	2.5%
2014	2,586,290	20,605	0.8%

Source: Annual Estimates of the Resident Population for Counties in Florida: April 1, 2010 to July 1, 2019 (CO-EST2019-ANNRES-12) - Release Date: March 2020

1 U.S. Census Bureau, Population Division

Construction Activity

MIAMI-DADE COUNTY, FLORIDA - LAST TEN FISCAL YEARS

	Commercial	Commercial Construction		Construction
	Number of	Value	Number of	Value
Fiscal Year	Buildings	(In thousands)	Units	(In thousands)
2023 ¹		\$	—	\$
2022	118	375,294	3,823	1,068,887
2021	120	151,835	3,427	790,771
2020	118	232,844	2,686	394,876
2019	132	133,329	3,195	460,048
2018	117	173,258	2,886	638,408
2017	92	408,257	2,259	467,543
2016	83	176,969	2,064	324,500
2015	94	74,157	3,472	451,617
2014	137	242,138	1,932	265,791

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

¹ For FY 2023 information unavailable as of the date of this report.

Principal Employers

MIAMI-DADE COUNTY, FLORIDA - CURRENT YEAR AND NINE YEARS AGO

		2023		2014					
Employer	Employees	Rank	Percentage of Total County Employment	Employees	Rank	Percentage of Total County Employment			
Miami-Dade County Public Schools	35,601	1	2.57 %	33,477	1	2.61 %			
Miami-Dade County	28,677	2	2.07 %	25,502	2	1.99 %			
University of Miami	21,276	3	1.54 %	12,818	5	1.00 %			
Jackson Health System	13,721	4	0.99 %	9,797	8	0.76 %			
Publix Super Markets	13,606	5	0.98 %	4,604	9	0.36 %			
American Airlines	10,961	6	0.79 %	11,031	7	0.86 %			
Amazon Airlines	8,014	7	0.58 %						
Walmart	7,005	8	0.51 %						
Florida International University	6,613	9	0.48 %	3,534	11	0.28 %			
United States Postal Service	5,828	10	0.42 %						
Miami-Dade College	5,563	11	0.40 %						
Department of Homeland Security	5,246	12	0.38 %						
Baptist Hospital of Miami	5,121	13	0.37 %						
City of Miami	4,802	14	0.35 %	3,997	10	0.31 %			
Baptist Health South Florida	4,652	15	0.34 %	11,353	6	0.88 %			
U.S. Federal Government				19,200	3	1.50 %			
Florida State Government				17,100	4	1.33 %			
Miami Children's Hospital				3,500	12	0.27 %			
Mount Sinai Medical Center				3,321	13	0.26 %			
Homestead Air Force Base				3,250	14	0.25 %			
Florida Power & Light Company				3,011	15	0.23 %			
	176,686		12.77 %	165,495		12.89 %			

Source: Florida Department of Commerce (FloridaCommerce), Bureau of Workforce Statistics & Economic Research The Beacon Council, Miami, Florida, Miami Business Profile

Economic Statistics MIAMI-DADE COUNTY UNEMPLOYMENT RATE AND LABOR FORCE

LAST TEN FISCAL YEARS

	Т	otal Personal		Personal	Unemployment	
Fiscal Year		Income		Income	Rate	Labor Force
2023		(1)		(1)	2.80 %	1,385,768
2022	\$	183,105,933	\$	68,481	2.30	1,371,121
2021		172,678,816		64,849	5.20	1,307,815
2020		154,891,958		57,213	12.60	1,396,663
2019		149,166,155		54,902	2.90	1,463,774
2018		138,138,976		50,022	3.60	1,363,766
2017		126,715,595		46,048	4.70	1,386,660
2016		123,276,064		45,440	5.80	1,334,404
2015		116,553,169		43,278	6.20	1,321,033
2014		111,528,866		43,123	7.20	1,282,854

Source: Economic Information System, Florida Agency for Workforce Innovation, Labor Market Statistics, Miami-Dade County Department of Regulatory and Economic Resources, Research Section University of Florida, Bureau of Economic and Business Research

⁽¹⁾ Information unavailable as of the date of this report.

Employees by Identifiable Activity

LAST TEN FISCAL YEARS

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
WATER:										
Water Distribution	226	237	228	240	224	222	222	230	221	220
Water Production and Maintenance	237	236	240	231	232	224	231	243	240	241
Laboratory Services	62	61	59	60	55	57	57	59	59	59
Meter ¹	96	96	95	94	97	96	_	_	_	_
SEWER:					-	-				
Sewer Collection	226	212	213	221	217	217	210	206	194	194
Wastewater Treatment and Maintenance	393	382	376	366	362	372	370	367	358	358
Pump Station Maintenance	232	229	227	241	226	228	230	208	195	197
SCADA ²	52	48	49	43	46	48	_	_	_	_
ENGINEERING:										
Utility Pipeline and Plant Engineering & Construction	36	35	75	74	78	77	66	71	71	71
Surveying	24	25	19	15	14	16	14	—	—	-
Utilities Development	136	126	120	113	110	111	107	105	104	94
Capital Improvements Program	80	83	32	25	27	26	29	55	50	69
ADMINISTRATION:										
Office of Director	7	6	3	3	29	20	21	24	17	32
Office of Deputy Director of Regulatory Compliance and Capital Improvements	13	27	20	17	11	15	16	21	9	6
Office of Deputy Director of Operations	4	4	4	3	12	14	3	4	47	45
Office of Assistant Director of Utility Engineering and Construction	6	4	4	4	4	3	2	1	1	1
Office of Chief Financial Officer	141	43	41	40	42	42	40	41	66	38
Office of Deputy Director of Internal and Administrative Services and Assistant Director of Customer Initiatives	31	94	97	89	76	79	73	77	114	114
Office of Assistant Director of Water	1	1	1	1	2	2	104	108	108	110
Office of Assistant Director of Wastewater	1	1	1	1	1	_	41	43	46	48
Office of Assistant Director of Regulatory Compliance and Planning	10	11	12	16	9	8	9	5	5	5
Office of Senior Advisor of Capital Projects sand Compliance ³	_	0	_	10	_	_	_	_	_	_
Attorney's Office	4	4	4	4	4	4	4	4	4	4
Controller	117	116	125	117	114	119	118	125	106	112
Information Technology	_	_	_	_	_	_	_	76	71	69
Retail Customer Service	241	241	238	242	247	248	219	238	255	243
Planning	16	19	23	22	23	22	25	25	19	19
Regulatory Compliance and Monitoring	14	15	12	14	14	15	15	17	17	16
General Maintenance	132	131	132	128	122	127	112	124	114	114
Human Resources Division	45	53	51	41	46	46	44	44	_	_
Security and Communications Division	37	34	34	39	40	40	43	44	_	_
Office of Assistant Contracts Compliance and Quality Assurance	3	3	2	2	3	3	3	4	_	_
Quality Assurance and Control Division	14	12	13	12	13	14	4	13	_	_
Performance Improvements & Management Division	11	11	13	10	12	12	13	17	_	_
Contract Compliance and Monitoring Division	24	20	19	21	22	26	20	27	_	_
Total	2,672	2,620	2,582	2,559	2,534	2,553	2,465	2,626	2,491	2,479

¹ Previously included in the Office of Assistant Director of Water

² Previously included in the Office of Assistant Director of Wastewater

³ Previously included in the Office of Director and Deputy Director of Operations

Capital Indicators

LAST TEN FISCAL YEARS

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
WATER:										
Water mains ¹ (miles)	6,376	6,345	6,316	6,288	6,271	6,269	6,264	6,131	6,035	6,004
Water treatment plants Permitted water treatment capacity	9	9	9	9	9	9	9	9	9	9
(million gallons per day)	464	464	464	464	464	464	461	461	464	464
Water supply wells	100	100	100	100	100	100	100	100	100	100
WASTEWATER:										
Sanitary sewers ¹ (miles)	4,267	4,253	4,225	4,214	4,191	4,191	4,184	4,165	4,110	4,072
Wastewater treatment plants Permitted wastewater treatment capacity	3	3	3	3	3	3	3	3	3	3
(million gallons per day)	376	376	376	376	376	376	376	376	376	376
Wastewater pump stations	1,041	1,041	1,041	1,041	1,041	1,052	1,049	1,049	1,047	1,047

¹ Does not include laterals.

Insurance in Force

Type of Coverage and Insurance Company	Policy Period	Details of Coverage	Limits of Liability
<i>Crime Policy:</i> Fidelity & Deposit Co. of Maryland	08/19/23 – 08/19/24	Employee Dishonesty	\$1,000,000
<i>Money and Securities:</i> Fidelity & Deposit Co. of Maryland	11/25/23 – 11/25/24	Theft of money and securities	Values scheduled per location
<i>Accidental Death:</i> Minnesota Life	01/01/24 – 01/01/25	Accidental death and dismemberment	\$25,000
Property Insurance: Ace American Ins. Co. AEGIS Electric & Gas Ins Services Underwriters at Lloyd's, London (Helvetia) Underwriters at Lloyd's, London (HDI) Underwriters at Lloyd's, London (Aspen)	03/02/24 – 03/02/25	"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)
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)
Workers' Compensation:	Continuous	Self-Insured	Statutory coverage pursuant to F.S. 440

(This page intentionally left blank.)



MIAMI-DADE WATER AND SEWER DEPARTMENT

A DEPARTMENT OF MIAMI-DADE COUNTY, FLORIDA 3071 S.W. 38 AVENUE • MIAMI, FLORIDA 33146 305-665-7471 WWW.MIAMIDADE.GOV/WATER

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.