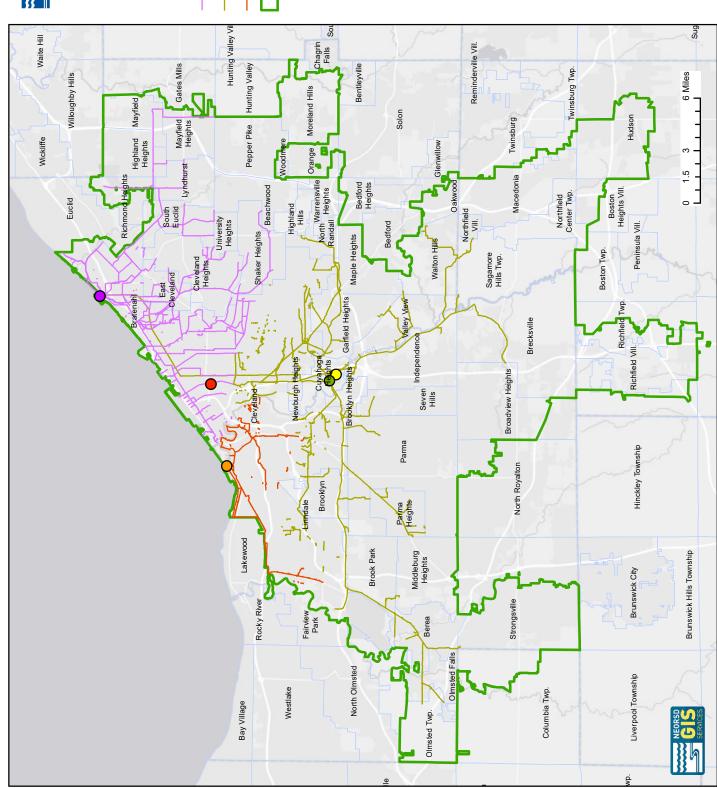




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NEORSD Wastewater Service Area Map







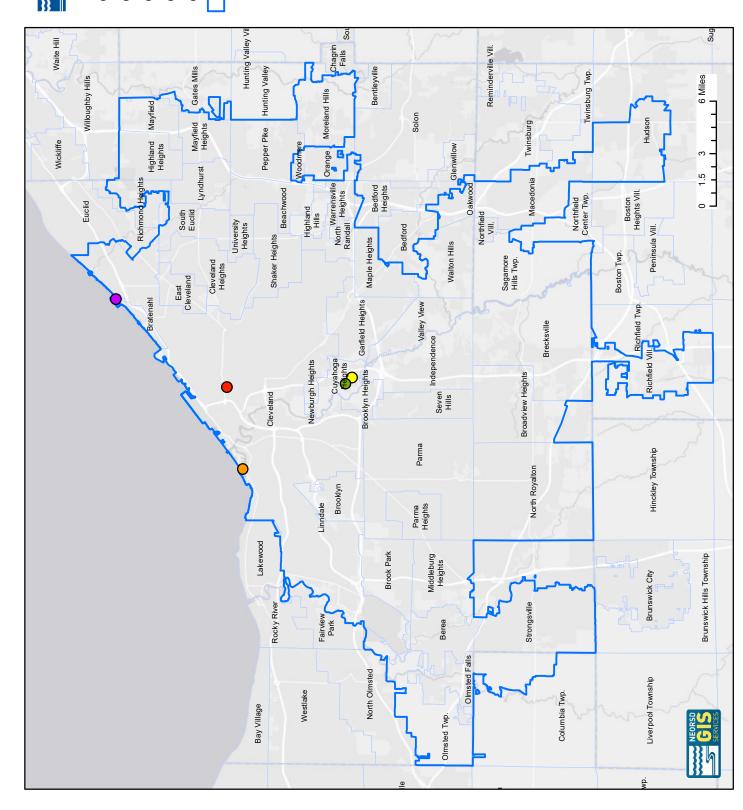
- **EASTERLY WWTP**
- **EMSC**
- GJM ADMINISTRATION

SOUTHERLY WWTC

- WESTERLY WPCC
- Easterly Interceptors
- Southerly Interceptors
- District Wastewater Service Area Westerly Interceptors



NEORSD Stormwater Service Area Map





EASTERLY WWTP

- EMSC
- GJM ADMINISTRATION
- SOUTHERLY WWTC
- **WESTERLY WPCC**
- District Stormwater Service Area



Northeast Ohio Regional Sewer District

A Political Subdivision of the State of Ohio

2019 Comprehensive Annual Financial Report For the Years Ended December 31, 2019 and 2018

Prepared by the Department of Finance

Kenneth J. Duplay, CPA, CMA Chief Financial Officer



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COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

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June 30, 2020

To the Board of Trustees and Citizens Served by the Northeast Ohio Regional Sewer District:

State law requires that all local governments publish within six months of the close of each fiscal year a complete set of financial statements. These financial statements are required to be presented in conformity with Generally Accepted Accounting Principles (GAAP) audited in accordance with standards generally accepted in the United States of America (USA) by licensed certified public accountants. Pursuant to that requirement, we hereby issue the Comprehensive Annual Financial Report of the Northeast Ohio Regional Sewer District (District) for the fiscal years ended December 31, 2019 and 2018.

This report consists of management's representations concerning the finances of the District. Consequently, management assumes full responsibility for the completeness and reliability of all the information presented in this report. To provide a reasonable basis for making these representations, District management has established a comprehensive internal control framework that is designed to protect the government's assets from loss, theft or misuse and to compile sufficient reliable information for the preparation of the District's financial statements in conformity with accounting principles generally accepted in the USA. Because the cost of internal controls should not outweigh their benefits, the District's comprehensive framework of internal controls is designed to provide reasonable, rather than absolute, assurance that the financial statements will be free from material misstatement. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

The District's financial statements have been audited by Ciuni and Panichi, Inc., a firm of licensed certified public accountants. The goal of the independent audit was to provide reasonable assurance that the financial statements of the District for the fiscal years ended December 31, 2019 and 2018, are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The independent auditor concluded, based on the audit, that there is reasonable basis for rendering an unmodified opinion that the District's financial statements for the fiscal years ended December 31, 2019 and 2018 are fairly presented in conformity with GAAP. The Independent Auditor's Report is presented as the first component of the financial section of this report.

GAAP requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The District's MD&A can be found immediately following the Independent Auditor's Report.

PROFILE OF THE DISTRICT

General

The District is an independent political subdivision of and organized under the laws of the State of Ohio, specifically Chapter 6119 of the Ohio Revised Code. Originally named the Cleveland Regional Sewer District, it was created in 1972 for the purpose of assuming the operation and management of certain wastewater collection, treatment and disposal facilities serving the Cleveland metropolitan area and previously owned and operated by the City of Cleveland, as well as addressing intercommunity drainage problems, both storm and sanitary.

Service Area

The District's service area includes more than 355 square miles, 330 miles of sewers, and a 476-mile regional stormwater system. The District encompasses the City of Cleveland and all or portions of 61 suburban communities in Cuyahoga, Lake, Lorain and Summit Counties. The stormwater service area includes 56 communities. The area contains a residential service population near one million persons and includes a diverse group of service, information, biotechnology, manufacturing and processing industries. The District manages stormwater and treats more wastewater than any other wastewater treatment system in the State of Ohio.

Governance

The District is governed by its Board of Trustees. The Board consists of seven members, each of whom serves a five-year term, and, are appointed as follows: (i) two by the Mayor of the City of Cleveland; (ii) two by a council of governments (the "Suburban Council") comprised of representatives of all suburban communities served by the system; (iii) one by the Cuyahoga County Council; (iv) one by the appointing authority of the subdistrict with the greatest flow; (v) and one by the appointing authority of the subdistrict with the greatest population.

Budgets

General provisions regulating the District's budget and appropriation procedures are set forth in the Ohio Revised Code. The Chief Executive Officer is required to submit the District's operating and capital budgets to the Board of Trustees, and they are required to adopt such budgets by March 31 of the year to which they apply. Readers should refer to the Schedule of Revenues, Expenses and Changes in Net Position – Budget to Actual on page 80 of this report, along with the accompanying Notes to Supplementary Information for additional budgetary information.

The section of the Ohio Revised Code under which the District is organized grants the District the power to raise revenues through taxes on property within its service area. In accordance with Chapter 5705 of the Code, the District does not file an annual Tax Budget because it does not levy any taxes.

FACTORS AFFECTING FINANCIAL CONDITION

The information presented in the financial statements is perhaps best understood when it is considered from the broader perspective of the environment within which the District operates.

Local Economy

The economic environment in which the District operates is affected by the same events and conditions as the rest of the State of Ohio and the nation. The District's revenue is expected to remain relatively stable due to the approval of a rate increase by the Board of Trustees. The region is not dominated by any single industry. Major industries with headquarters or divisions located in the District's service area or in close proximity include automotive manufacturers, industrial equipment, metals, paints and coatings producers, insurance and banking services. Major employers in the area include federal, state, county and municipal government agencies, health care providers, public schools, financial service providers, manufacturers and retail establishments. In recent years there has been a significant shift from manufacturing to a service and information-based economy.

The annual unemployment rate in 2019 (per the Bureau of Labor Statistics not seasonally adjusted) for Cuyahoga County, which is significantly the same as the District's service area, was 3.6%. Cuyahoga County's unemployment rate was 0.2% lower than the unemployment rate for the State of Ohio (3.8%) and 0.2% higher than the national rate of 3.4%. Although the City of Cleveland and Cuyahoga County have experienced an outward migration of residents to neighboring suburbs and counties, the presence of corporate, cultural and entertainment facilities continue to attract visitors and commuters to the area.

Long-Term Financial Planning

The District has produced a strong financial history since its inception in 1972. Moving forward, the District is positioned to continue to meet the level of service and regulatory requirements demanded by its customers, its Board of Trustees and regulatory agencies. Part of that responsibility will entail investment, over the next 10 years, of approximately \$2.4 billion in new Combined Sewer Overflow (CSO) controls and wastewater facility improvements.

The District maintains a long-range financing plan for its operating and capital budgets. The District's five-year financing plan for the capital budget provides for over \$1.3 billion in capital project expenditures from 2020 to 2024, primarily for improvements to our Southerly Wastewater Treatment Plant and our CSO long-term control plan. This includes approximately \$202.8 million for the plants, \$865.3 million for the CSO projects, \$104.9 million for the collection system and building improvements and \$107.3 million of miscellaneous District-wide improvements and minor capital purchases. Over this five-year period, the District will need to address both regulatory driven capital improvements and rehabilitation driven capital improvements at its three (3) wastewater treatment plants and within its collection system.

In 2016, the District completed a five-year, long-term financial and rate impact model for rates in effect from 2017-2021. The model incorporates specific year by year details to determine the sewer rates over the five-year rate period. During 2020, the District will begin the rate study for sewer and stormwater for the next rate period of 2022-2026.

Debt Administration

At year-end, the District had bonded debt outstanding of \$1,009,645,000. The debt, including applicable bond premium costs and discounts, is \$1,073,331,193. The District has also obtained loans through the State of Ohio Water Pollution Control Loan Fund (WPCLF). As of December 31, 2019, the outstanding loan balance was \$707,522,345 for the WPCLF. Outstanding revenue bonds of the District are rated AA+ by Standard & Poor's and Aa1 by Moody's rating agencies. Note 6 to the financial statements includes schedules of debt outstanding and future debt service requirements.

In 2010, the District issued \$336,930,000 Wastewater Improvement Revenue Bonds, Series 2010, as Federally Taxable Build America Bonds for the purpose of providing funds for the acquisition, construction and improvement of wastewater facilities or water management facilities, constituting Water Resource Projects. This information should be read in conjunction with Note 6 to the financial statements.

In 2013, the District issued \$249,535,000 Wastewater Improvement Revenue Bonds, Series 2013, for the purpose of providing funds for the acquisition, construction and improvement of wastewater facilities or water management facilities, constituting Water Resource Projects. This information should be read in conjunction with Note 6 to the financial statements.

In 2014, the District issued \$419,030,000 of Wastewater Improvement Revenue and Refunding Bonds, Series 2014. The Wastewater Improvement Revenue and Refunding Bonds, Series 2014 Bonds were comprised of \$350,570,000 (2014A) for new bonds and \$68,460,000 (2014B) to refund a portion of the 2007 Wastewater Improvement Revenue Bonds previously issued. The Wastewater Improvement Revenue and Refunding Bonds, Series 2014 were issued for the purpose of providing funds for the acquisition, construction and improvement of wastewater facilities or water management facilities, constituting Water Resource Projects. This information should be read in conjunction with Note 6 to the financial statements.

In 2016, the District issued \$25,015,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2016. The Series 2016 Bonds were comprised of \$25,015,000 to refund a portion of the 2007 Wastewater Improvement Revenue Bonds previously issued. The Refunding Bonds, Series 2016 were issued to advance refund the outstanding Series 2007 Bonds and achieve uniform debt service savings. This information should be read in conjunction with Note 6 to the financial statements.

In 2017, the District issued \$241,595,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2017. The Series 2017 Bonds were comprised of \$241,595,000 to refund a portion of the 2013 Wastewater Improvement Revenue Bonds previously issued. The Refunding Bonds, Series 2017 were issued to advance refund the outstanding Series 2013 Bonds and achieve uniform debt service savings. This information should be read in conjunction with Note 6 to the financial statements.

In 2019, the District issued \$245,005,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2019. The Series 2019 Bonds were comprised of \$245,005,000 to refund a portion of the 2010 Wastewater Improvement Revenue Bonds previously issued. The Refunding Bonds, Series 2019 were issued to advance refund the outstanding Series 2010 Bonds and achieve uniform debt service savings. This information should be read in conjunction with Note 6 to the financial statements.

MAJOR INITIATIVES

For the Year

2019 Awards

During 2019, the District received awards for 2018 plant performance from the National Association of Clean Water Agencies (NACWA). NACWA honored all three of our Wastewater Treatment Plants (WWTPs) for excellent performance in 2018.

The Easterly plant earned Peak Performance Silver awards that recognize facilities with no more than five violations per calendar year. The Westerly and Southerly plants earned Peak Performance Gold awards that recognize facilities with no permit violations for the entire calendar year. Awards for 2019 performance have not been announced as of the date of this report.

During 2019, the Government Finance Officers Association of the United States and Canada (GFOA) presented the Distinguished Budget Presentation Award to the District for the thirteenth time for its 2019 Budget.

Business Opportunity Program

The Office of Contract Compliance was formed in 2008. After receiving the recommendations from the Disparity Study in 2010, the Business Opportunity Program (BOP) was created which allows Minority Business Enterprise (MBE), Women Business Enterprise (WBE) and Small Business Enterprise (SBE) goals to be placed on projects. The Office of Contract Compliance monitors payments, prevailing wages and provides outreach services for certified firms. The BOP is designed to contribute to the economic health and vitality of the region by providing a greater opportunity to conduct business with the District, resulting in job and business growth for the local business community. Bringing new companies into the District's procurement process enhances the competitive bidding process which helps deliver the greatest value. The District awarded over \$70.0 million worth of business to MBE/WBE/SBE on construction, engineering and stormwater projects in 2019. The total number of certified firms in 2019 was 386. Also, payments made to small firms were indirect or direct in the areas of goods, professional services, construction and engineering.

Supplier Registration

In November 2013, the Purchasing Department implemented the new Oracle eBusiness Suite which included Purchasing, Sourcing and the iSupplier online registration system. Suppliers benefit from a more streamlined purchasing process that involves electronic communication. They are able to view all purchase order activity for their company, provide quotes and see awarded quotes, create invoices and track payment status using iSupplier. The system tracks product and services provided by the registered supplier for future quoting opportunities and suppliers interested in participating in the Business Opportunity Program. The District currently has over 5,683 registered suppliers.

Human Resources Programs

The mission of the Human Resources (HR) Department is to contribute to the success of the District by creating an engaging environment where our workforce can thrive. We strive to provide fair, reliable, and efficient programs that:

- Enhance workforce effectiveness through training and development
- Provide great HR customer service to our employees
- Maintain legal and organizational compliance
- Attract top talent through innovative recruitment strategies
- Embrace diversity and encourage inclusion

The following are 2019 highlights and successes in each area:

Enhance Workforce Effectiveness Through Training and Development

HR continued to provide programs to support all levels of the District with the training and development opportunities:

• Technical Training

- ➤ Ohio State Apprentice Council (OSAC) update:
 - Active apprentices and employees have completed the apprenticeship and are waiting for their completion certificates
 - Employees graduated from the Maintenance Training Program and trainees are at various stages of the Wastewater Plant Operator in Training Program

Operations & Maintenance Job Specific Training completed:

- Boilers 1 and 2 training classes
- CAD, PLC, and PLC 3 training classes
- Centrifugal pump and Fluid Power training classes
- CDL and Defensive Driving training classes
- Electrical Safety, High Voltage and Commercial Wiring and training classes
- Instrumentation & Control and Electronics & Instrumentation training classes
- Many more Job Specific Training classes were completed in 2019

➤ Tuition Assistance Program (TAP)

- 52 District employees participated in Tuition Assistance Program (TAP) totaling \$250,000

Career Pathing

- Established career path methodology and completed work for Engineering & Construction, began the process for Operations & Maintenance and Watersheds

► <u>Leadership Development Training</u>

- First FLUSH (Familiarize Leaders Upon Starting Here) Leadership Training: Facilitated two cohorts in June 2019 and September 2019
- LEAD (Leadership Excellence & Development) Leadership Training: Provided training to employees moving from individual contributor or supervisory positions

Provide Great HR Customer Service to Our Employees:

- Refreshed the HR vision to focus on providing fair, reliable, and efficient service
- Established HR Business Partners for every facility who provide service across all areas of HR
- Improved our HR systems by finalizing the implementation of UltiPro Recruiting/ Onboarding functionality and making improvements to the UltiPro Time Management system
- Evolved our benefits offering saving the District more than \$850,000 for the 2020 benefit year through the competitive bidding process and plan design changes

Maintain Legal and Organizational Compliance:

• Upon successful completion of negotiations and signing of the AFSCME CBA, delivered training to management on OPBA, 18-S, and AFSCME Union Collective Bargaining Agreement changes and key provisions to ensure consistent application and adherence of articles

Attract Top Talent Through Innovative Recruitment Strategies

- Recruited and onboarded 88 external hires
- Promoted and transferred 66 internal employees
- Attended more than 60 career fairs and recruiting events
- Ensured that 100% of interview panels met diversity requirements

Embrace Diversity and Encourage Inclusion

- Launched the Understanding Unconscious Bias and Microinequities Training Districtwide
- Coordinated Racial Equity and Inclusion Training Phase I training for Senior Staff and District employees who completed the 2-day course
- Coordinated the delivery of the Executive Thought Leadership 360 Session for all Senior Staff
- Delivered a half day Women's Leadership Symposium on the topic of Generational Diversity

Awards, Recognition and External Participation

• The District's quarterly internal program awarded 26 employees and 28 teams for their contributions. The District's annual internal program honored 7 retirees and 139 employees for their years of service, and a Plant Superintendent received the Lifetime Achievement Award - an award recognizing employees for their contributions to our work, our region, and our mission

CSO Long-Term Control Plan

The District has responsibility for combined sewer overflows within its service area. The District holds an NPDES permit for the CSOs and is required to meet the requirements of capital improvement projects to significantly reduce the amount of overflow during rainstorms.

In addition to its three (3) wastewater treatment plants and over 300 miles of interceptor sewers, the District has responsibility for combined sewer overflows (CSOs) within its service area. The federal Clean Water Act and U.S. Environmental Protection Agency's (U.S. EPA) CSO Control Policy, along with the District's state-issued CSO National Pollution Discharge Elimination System (NPDES) permit, require the District to develop a Long-Term Control Plan (LTCP) to reduce or eliminate the number of overflows from its 126 permitted outfalls. In 2010, the District came to a negotiated agreement with Ohio and U.S. EPA, U.S. Department of Justice and the Ohio Attorney General's Office on a 25-year, \$3 billion CSO LTCP for which the District obtained authorization from its Board of Trustees to enter into a Consent Decree with the state and federal agencies in December 2010.

Prior to the CSO LTCP, the District had already invested an estimated \$850 million and reduced CSO volumes by half – from 9.0 to 4.5 billion gallons since 1972. The District's CSO LTCP will further control CSOs reducing the number of overflows to four or less per year (three or less at priority CSOs) resulting in an estimated 98.0% capture of all wet weather flows and reducing CSO volumes to less than 500 million gallons in a typical year.

In 2019, the District commenced full operation of the Dugway Storage Tunnel. This tunnel along with the previously activated Euclid Creek Tunnel and associated pump station have the capacity to store 117 million gallons of combined sewage for treatment at the District's Easterly Wastewater Treatment Plant. These two (2) tunnels in combination with the third of the seven large-scale tunnels, the Doan Valley Tunnel (DVT), will control approximately 1 billion gallons of CSO in a typical year. The District continued to advance construction of the DVT and the design of the fifth large-scale tunnel, the Shoreline Storage Tunnel. Additionally, the District continued to advance the construction of the Westerly Storage Tunnel, the fourth of seven large-scale tunnels to be constructed under the Consent Decree. This tunnel system when complete will have the capacity to store 36 million gallons of combined sewage for treatment at the District's Westerly Wastewater Treatment Plant controlling approximately 250 million gallons of CSO in a typical year. Ultimately, the District will construct seven tunnels under its Consent Decree, which range from two to five miles in length, up to 300 feet underground and up to 24 feet in diameter. The tunnels are similar to the previously constructed Mill Creek Tunnel, a structure that has the capacity to store 75 million gallons of combined sewage until it can be treated at the District's Southerly Wastewater Treatment Plant.

The District plan also includes a commitment to a minimum of \$42 million in green infrastructure projects to reduce a minimum of 44 million gallons of wet weather CSO flows beyond those captured by the tunnel systems. In total, nine (9) green infrastructure projects will be constructed. In 2019, construction of the last three (3) green infrastructure projects was completed.

Asset Management

Asset Management is the practice of managing the entire life cycle of assets with the objective of providing the best service while balancing acceptable risk and overall costs. Asset management principals have been incorporated into the District's capital and maintenance activities.

Capital Planning:

The District has been utilizing a consistent, risk-based method for validating and prioritizing its Engineering Capital Improvement Program. Additionally, the District collects and manages data for all of its plant and collection system assets to understand each asset's condition, criticality, repair and/or replacement costs and estimated year of renewal. The District uses this data to forecast long-term asset-related expenditures by year for incorporation into the Capital Improvement Program planning process.

Maintenance Activities:

The District has developed and implemented Key Performance Indicator (KPI) metrics to measure operations and maintenance performance against desired targets/goals. KPIs allow the District to objectively improve cost accounting to the asset level, increase proactive/planned maintenance while reducing unplanned breakdowns, monitor work order backlog management, audit process sustainment and ultimately ensure that the right maintenance is performed in the right amounts, at the right time in order to maintain critical assets at the acceptable level of risk at minimum cost.

Regional Stormwater Management Program

The District's founding Court Order required the District to "develop a detailed integrated capital improvement plan for regional management of wastewater collection and storm drainage to identify a capital improvement program for the solution of all intercommunity drainage problems (both storm and sanitary) in the District." The District initially focused on the sanitary sewage portion of this mandate, investing over \$5 billion since its inception on a wide variety of sanitary sewage-related projects. To address the regional stormwater portion of this mandate, the District procured services in 2007 to assist with the development and implementation of a Regional Stormwater Management Program (the "Stormwater Program"). Tasks related to defining stormwater program roles and responsibilities, funding approaches, resource needs, legal issues, customer service requirements and data/billing issues were addressed, leading to the development of the District's Stormwater Code of Regulations (Title V), which the District's Board of Trustees approved in January 2010.

From 2010-2012, the Stormwater Program was in litigation in the Cuyahoga County Common Pleas Court over issues related to the District's "authority" to implement the program as an Ohio Revised Code 6119 entity, and "fee versus tax" issues related to the District's stormwater fee. The District prevailed in the litigation and began the Stormwater Program in January 2013.

In July 2012, parties opposed to the District's Regional Stormwater Management Program filed an appeal to the 8th Appellate District to seek a halt to the Regional Stormwater Management Program. On September 26, 2013, the Appellate Court halted the District's Regional Stormwater Management Program by a 2 to 1 decision with a strong dissent. The District immediately suspended its program and placed all fees collected into an interest-bearing escrow account pending an appeal to the Supreme Court of Ohio. The District filed its notice of appeal in November 2013, and the Supreme Court accepted the case in February 2014. Oral arguments before the Supreme Court took place on September 9, 2014. In December 2015, the Ohio Supreme Court issued its final opinion that the District has the authority to implement the Regional Stormwater Management Program and collect the impervious surface fee. The District has restarted the Stormwater Program and resumed billing in July of 2016. The anticipated yearly estimated revenue from the Stormwater Program is over \$44 million.

The Stormwater Program is designed to address long-standing regional stormwater flooding, erosion and water quality issues resulting from the incremental increases in stormwater runoff from hard surfaces that make their way into storm sewers and streams. The fees collected from the Stormwater Program are used to fund construction projects to solve regional stream flooding and erosion problems, for operation and maintenance activities to minimize the potential for flooding and erosion and for master planning studies to outline a long-term construction and maintenance program along regional streams. Twenty-five percent (25.0%) of cash collected from each municipality within the service area is returned to the respective member community for funding of local stormwater management projects through the Community Cost Share program (CCS).

Community Cost-Share Program

The Community Cost-Share Program provides funding to Member Communities for community-specific stormwater management projects. To implement the Community Cost-Share Program, the District has formed a financial account termed "Community Cost-Share Account" for the aggregation and dissemination of funds derived from Stormwater Fees collected in each Member Community. This program is presented in the non-operating expenses of the Statements of Revenues, Expenses and Changes in Net Position. 25.0% of the total annual Stormwater Fee collected in each Member Community is allocated to the Community Cost-Share Account for each Member Community. The Community Cost-Share Account is under the control of the District, with disbursement of funds to Member Communities through a grant application and reimbursement process.

To access Community Cost-Share Program funds, Member Communities must maintain compliance with *Title V: Stormwater Management Code*. A Community Cost-Share Program Project must clearly promote or implement the goals and objectives of the District set forth in Title V and must be intended to address current, or minimize new, stormwater flooding, erosion, and water quality problems.

Green Infrastructure Grant Program

The District supports the strategic implementation and long-term maintenance of green infrastructure that protects, preserves, enhances, and restores natural hydrologic function. The Green Infrastructure Grant (GIG) Program focus is the funding of green infrastructure projects within the combined sewer area. Green infrastructure refers to stormwater source control measures that store, filter, infiltrate, or evapotranspirate stormwater to increase resiliency of infrastructure by reducing stress on wet-weather drainage and collection systems thereby supporting healthy environments and strong communities.

The GIG Program for the combined sewer area is open to member communities, non-profits, and private organizations in the combined sewer area interested in implementing water resource projects that remove stormwater from the combined sewer system and in ensuring the long-term maintenance of these practices. A GIG is awarded through a competitive funding process with final recommendations approved by the District Board of Trustees. The availability of GIG Program funds in any calendar year is at the discretion of the Board of Trustees. This program is presented in the non-operating expenses of the Statements of Revenues, Expenses and Changes in Net Position.

Member Community Infrastructure Program

The Member Community Infrastructure Program (MCIP) is a funding program provided by the District to assist both communities and other eligible public entities—that own, operate and maintain public sewer infrastructure that is tributary to a District wastewater—treatment plant, with cost-effective sewer infrastructure projects to address water quality and quantity—issues associated with sewer infrastructure that adversely impact human health and the environment. The availability of MCIP Program funds in any calendar year is at the discretion of the Board of Trustees. This program is presented in the non-operating expenses of the Statements of Revenues, Expenses and Changes in Net Position.

The intent of the MCIP is to provide an annual funding opportunity to communities and eligible public entities for sewer infrastructure repair and rehabilitation that will:

- Continue progress towards environmentally sustainable and healthy communities through protection and improvement of the region's water resources consistent with the vision of the District.
- Improve function and condition of the local sewer system.
- Identify and remove sources of inflow and infiltration (I/I) from the sewer system. This reduction would preserve the hydraulic capacity of the local and District sewer system and alleviate problems such as basement flooding.

Strategic and Operational Action Plan

The Northeast Ohio Regional Sewer District Strategic Plan covers the years 2019 through 2021. Since its development and approval in 2018, the Sewer District has advanced the goals and objectives moving into now the second year of the plan.

The Plan was constructed around five strategic areas of focus: Customer and Community Connections, Environmental Protection and Sustainability, Financial Viability, Operational Excellence, and Workforce Planning and Investment. All strategic objectives were aligned to one of these five areas, and are committed to the District's mission, vision and values.

The Strategic Plan provides a navigational guide for the District through 2021. The continually changing environment in which the District operates requires annual review in order for these plans to remain timely and useful. The District continues to understand and meet customer needs, enhance water quality, provide for cost-effective and efficient capital improvements, and build on its already strong reputation as a preeminent leader among water agencies.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the District for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2018. This was the 24th consecutive year that the District has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Comprehensive Annual Financial Report. This 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. We believe that our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

ACKNOWLEDGEMENTS

The preparation of this Comprehensive Annual Financial Report would not have been possible without the efficient and dedicated services of the entire staff of the Finance department and the Communications and Community Relations department. We would like to express our appreciation to all members of the departments who assisted and contributed to the preparation of this report. Credit must also be given to the Board of Trustees for their unfailing support for maintaining the highest standards of professionalism in the management of the District's finances.

Respectfully submitted,

Kyle Deyfuss-Wells Chief Executive Officer

Kenneth J. Duplay Chief Financial Officer This Page Intentionally Left Blank.



2018 Comprehensive Annual Financial Reporting Award



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Northeast Ohio Regional Sewer District

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2018

Christopher P. Morrill

Executive Director/CEO



2019 Government Finance Officers Association Distinguished Budget Award



GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished
Budget Presentation
Award

PRESENTED TO

Northeast Ohio Regional Sewer District
Ohio

For the Fiscal Year Beginning

January 1, 2019

Christopher P. Morrill

Executive Director

NORTHEAST OHIO REGIONAL SEWER DISTRICT TABLE OF ORGANIZATION DECEMBER 31, 2019

BOARD OF TRUSTEES



Darnell Brown Board President



Ronald D. Sulik Vice President



Mayor Timothy DeGeeter Secretary



Mayor Jack Bacci



Julius Ciaccia



Sharon A. Dumas



Mayor Robert A. Stefanik

OFFICERS



Kyle Dreyfuss-Wells Chief Executive Officer



Kenneth J. Duplay Chief Financial Officer 79 employees



James Bunsey Chief Operating Officer 458 employees



Eric Luckage Chief Legal Officer 10 employees

DIRECTORS



Devona Marshall Director of Engineering and Construction 47 employees



Francis P. Greenland Director of Watershed Programs 121 employees



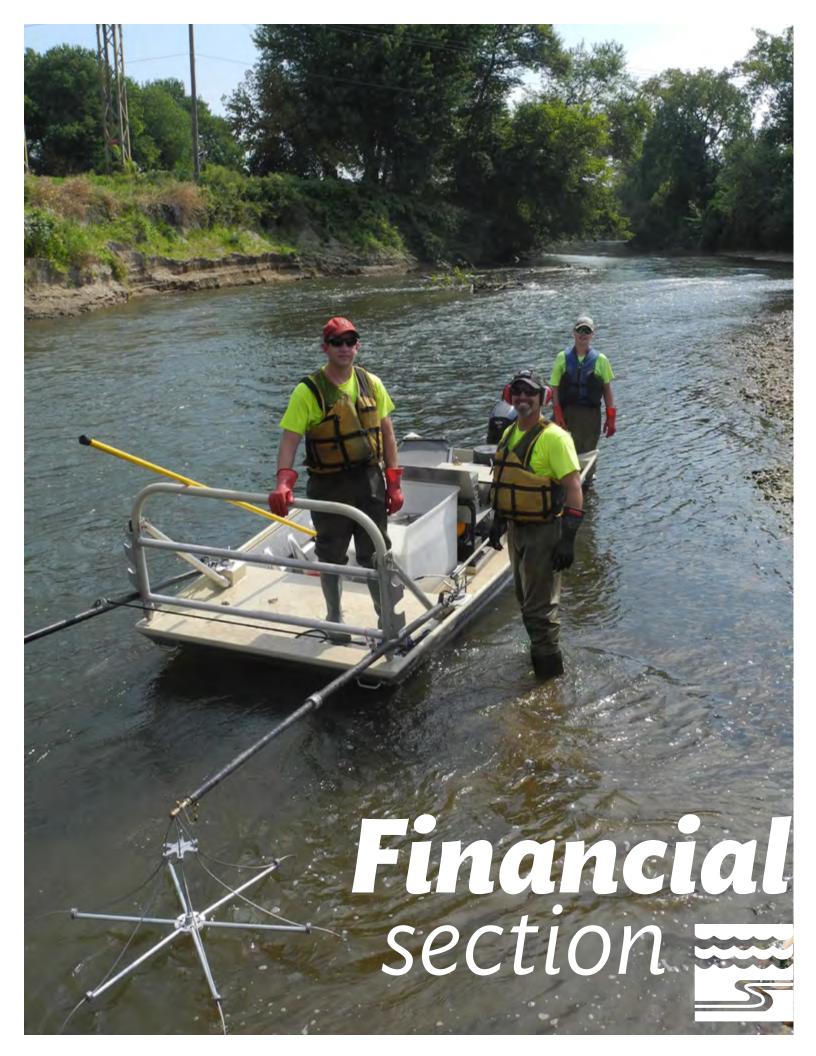
Constance T. Haqq Director of Administration and External Affairs and Interim Director of Human Resources 59 employees



Mohan Kurup Director of Information Technology 33 employees



Francis G. Foley
Director of
Operations and Maintenance
411 employees





Where Relationships Count.

Independent Auditor's Report

Board of Trustees Northeast Ohio Regional Sewer District Cleveland, Ohio

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Northeast Ohio Regional Sewer District (the "District"), as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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



Board of Trustees Northeast Ohio Regional Sewer District

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the District, as of December 31, 2019 and 2018, and the changes in its financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required schedules on pensions and other postemployment benefits as listed in the table of contents 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 basic financial statements, and other knowledge we obtained during our audits of the basic 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.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the District's basic financial statements. The introductory section, budgetary comparison information, and statistical section, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The budgetary comparison 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. Such information has been subjected to the auditing procedures applied in the audits 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 budgetary comparison information is fairly stated in all material respects in relation to the basic financial statements as a whole.

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

Board of Trustees Northeast Ohio Regional Sewer District

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 30, 2020, on our consideration of the District'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 District'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 the District's internal control over financial reporting and compliance.

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Cleveland, Ohio June 30, 2020

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Management's Discussion and Analysis

The following discussion provides a summary overview of the financial activities of the Northeast Ohio Regional Sewer District (the "District") for the years ended December 31, 2019 and 2018. This information should be read in conjunction with the letter of transmittal, basic financial statements and notes to those financial statements included in this report.

Financial Highlights

- Assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,591,974,462.
- Net position increased by \$62,408,113.
- Net investment in capital assets increased by \$34,318,547.
- Unrestricted net position increased by \$26,224,366.
- Retirement of debt principal was \$296,501,031, of which \$251,720,000 was for the defeasance of a portion of 2010 bonds.
- Operating revenues increased by \$15,023,851.
- Operating expenses increased by \$25,233,876.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the District's basic financial statements. The District's basic financial statements are the statements of net position, the statements of revenues, expenses and changes in net position, the statements of cash flow and the accompanying notes to the basic financial statements. This report also contains required supplementary information and other supplementary information in addition to the basic financial statements. These statements report information about the District as a whole and about its activities. The District is a single enterprise fund using proprietary fund accounting, which means these statements are presented in a manner similar to a private-sector business. The statements are presented using the economic resources measurement focus and the accrual basis of accounting.

The statements of net position present the District's financial position and report the resources owned by the District (assets and deferred outflows of resources) and obligations owed by the District (liabilities and deferred inflows of resources) and District net position (the difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources). The statements of revenues, expenses and changes in net position present a summary of how the District's net position changed during the year. Revenues are reported when earned and expenses are reported when incurred. The statements of cash flow provide information about the District's cash receipts and disbursements during the year. They summarize net changes in cash resulting from operating, investing and financing activities. The notes to the basic financial statements provide additional information that is essential for a full understanding of the financial statements.

Financial Analysis of the District's Financial Position and Results of Operations

The following tables provide a summary of the District's financial position and operations for 2019 and 2018, respectively. Certain amounts may vary slightly due to differences caused by rounding to thousands.

Management's Discussion and Analysis

Condensed Statements of Net Position December 31,

(In Thousands)

Change

				Change		
	20	19	 2018	1	Amount	%
<u>Assets</u>						
Current Assets	\$	509,940	\$ 492,106	\$	17,834	3.6%
Capital Assets, Net	2,	,973,767	2,834,718		139,049	4.9%
Other Noncurrent Assets		42,844	25,147		17,697	70.4%
Total Assets	3,	,526,551	3,351,971		174,580	5.2%
Deferred Outflows of Resources						
Pension		30,377	16,708		13,669	81.8%
OPEB		5,029	4,898		131	2.7%
Deferred Charge on Refunding		25,613	15,654		9,959	63.6%
Total Deferred Outflows of Resources		61,019	37,260		23,759	63.8%
Total Assets and Deferred Outflows of Resources	3,	,587,570	3,389,231		198,339	5.9%
<u>Liabilities</u>						
Current Liabilities		109,735	120,054		(10,319)	(8.6%)
Long-Term Debt	1,	,735,517	1,623,079		112,438	6.9%
Net Pension Liability		97,079	56,918		40,161	70.6%
Net OPEB Liability		49,956	42,429		7,527	17.7%
Other Long-Term Liabilities		-	200		(200)	(100.0%)
Total Liabilities	1,	,992,287	1,842,680		149,607	8.1%
Deferred Inflows of Resources						
Pension		2,563	13,823		(11,260)	(81.5%)
OPEB		745	3,161		(2,416)	(76.4%)
Total Deferred Inflows of Resources		3,308	16,984		(13,676)	(80.5%)
Net Position						
Net Investment in Capital Assets	1,	,231,285	1,196,967		34,318	2.9%
Restricted - Stormwater Community Cost-Share		25,911	24,046		1,865	7.8%
Unrestricted		334,779	308,554		26,225	8.5%
Total Net Position	\$ 1,	,591,975	\$ 1,529,567	\$	62,408	4.1%

The District adopted GASB Statement 68, "Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement 27," which significantly revises accounting for pension costs and liabilities. In 2018, the District adopted GASB Statement 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions," which significantly revises accounting for costs and liabilities related to other postemployment benefits (OPEB). For reasons discussed below, many end users of this financial statement will gain a clearer understanding of the District's actual financial condition by adding deferred inflows related to pension and OPEB, the net pension liability and the net OPEB liability to the reported net position and subtracting the net pension asset and deferred outflows related to pension and OPEB.

Governmental Accounting Standards Board standards are national and apply to all government financial reports prepared in accordance with generally accepted accounting principles. When accounting for pension costs, GASB 27 and GASB 45 focused on a funding approach. This approach limited pension and OPEB costs to contributions annually required by law, which may or may not be sufficient to fully fund each plan's *net pension liability or net OPEB liability*. GASB 68 and GASB 75 take an earnings approach to pension and OPEB accounting; however, the nature of Ohio's statewide pension/OPEB systems and state law governing those systems requires additional explanation in order to properly understand the information presented in these statements.

Management's Discussion and Analysis

GASB 68 and GASB 75 require the net pension liability (asset) and the net OPEB liability to equal the District's proportionate share of each plan's collective:

- 1. Present value of estimated future pension/OPEB benefits attributable to active and inactive employees' past service
- 2. Minus plan assets available to pay these benefits

GASB notes that pension and OPEB obligations, whether funded or unfunded, are part of the "employment exchange" – that is, the employee is trading his or her labor in exchange for wages, benefits, and the promise of a future pension and other postemployment benefits. GASB noted that the unfunded portion of this pension promise is a present obligation of the government, part of a bargained-for benefit to the employee and should accordingly be reported by the government as a liability since they received the benefit of the exchange. However, the District is not responsible for certain key factors affecting the balance of these liabilities. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both employer and employee contribution rates are capped by State statute. A change in these caps requires action of both Houses of the General Assembly and approval of the Governor. Benefit provisions are also determined by State statute. The Ohio Revised Code permits but does not require the retirement systems to provide healthcare to eligible benefit recipients. The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits.

The employee enters the employment exchange with the knowledge that the employer's promise is limited not by contract but by law. The employer enters the exchange also knowing that there is a specific, legal limit to its contribution to the retirement system. In Ohio, there is no legal means to enforce the unfunded liability of the pension/OPEB plan *as against the public employer*. State law operates to mitigate/lessen the moral obligation of the public employer to the employee, because all parties enter the employment exchange with notice as to the law. The pension system is responsible for the administration of the pension and OPEB plans.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e. sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability or the net OPEB liability. As explained above, changes in benefits, contribution rates, and return on investments affect the balance of these liabilities but are outside the control of the local government. In the event that contributions, investment returns, and other changes are insufficient to keep up with required payments, State statute does not assign/identify the responsible party for the unfunded portion. Due to the unique nature of how the net pension liability and the net OPEB liability are satisfied, these liabilities are separately identified within the long-term liability section of the statement of net position.

In accordance with GASB 68 and GASB 75, the District's statements prepared on an accrual basis of accounting include an annual pension expense and an annual OPEB expense for their proportionate share of each plan's change in net pension liability (asset) and net OPEB liability, respectively, not accounted for as deferred inflows/outflows.

The District's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,591,974,462 as of December 31, 2019, of which \$1,231,285,119 is for net investment in capital assets. The largest portion of the District's net position is reflected in its capital assets, less accumulated depreciation and related debt outstanding used to fund these asset acquisitions.

Management's Discussion and Analysis

During 2019, net position increased by \$62,408,113. The majority of this increase was due to the following:

- Net capital assets increased by \$139,048,789 due to construction in progress and additions to the sewer system and wastewater treatment systems.
- Total long-term obligations increased by \$159,926,198. Additions of \$245,005,000 were for 2019 wastewater revenue refunding bonds, \$156,457,322 were for WPCLF. There was a \$40,160,260 increase for net pension liability. There was an increase of \$7,527,009 for the net OPEB liability. The reductions were for the repayment of debt principal on revenue bonds and WPCLF in the amount of \$44,781,031, and \$251,720,000 for the defeasance of a portion of Series 2010 bonds.
- Deferred inflows of resources related to pension decreased by \$11,260,647. The net pension asset decreased by \$222,308 and the deferred outflows of resources for pension increased by \$13,669,592.
- The District's deferred inflows of resources for OPEB decreased by \$2,415,142. Increases to deferred outflows of resources for OPEB were \$130,289.

In order to further understand what makes up the changes in net position for the current year, the following table gives readers further details regarding the results of activities for 2018.

Condensed Statements of Net Position December 31, (In Thousands)

		Restated	Change	
	2018	2017	Amount	%
<u>Assets</u>				
Current Assets	\$ 492,106	\$ 441,374	\$ 50,732	11.5%
Capital Assets, Net	2,834,718	2,673,938	160,780	6.0%
Other Noncurrent Assets	25,147	67,437	(42,290)	(62.7%)
Total Assets	3,351,971	3,182,749	169,222	5.3%
<u>Deferred Outflows of Resources</u>				
Pension	16,708	31,550	(14,842)	(47.0%)
OPEB	4,898	603	4,295	712.3%
Deferred Charge on Refunding	15,654	16,698	(1,044)	(6.3%)
Total Deferred Outflows of Resources	37,260	48,851	(11,591)	(23.7%)
Total Assets and Deferred Outflows of Resources	3,389,231	3,231,600	157,631	4.9%
<u>Liabilities</u>				
Current Liabilities	120,054	104,354	15,700	15.0%
Long-Term Debt	1,623,079	1,558,547	64,532	4.1%
Net Pension Liability	56,918	77,659	(20,741)	(26.7%)
Net OPEB Liability	42,429	36,827	5,602	15.2%
Other Long-Term Liabilities	200	400	(200)	(50.0%)
Total Liabilities	1,842,680	1,777,787	64,893	3.7%
Deferred Inflows of Resources				
Pension	13,823	668	13,155	1969.3%
OPEB	3,161	<u>-</u>	3,161	100.0%
Total Deferred Inflows of Resources	16,984	668	16,316	2442.5%
Net Position				
Net Investment in Capital Assets	1,196,967	1,107,066	89,901	8.1%
Restricted - Stormwater Community Cost-Share	24,046	17,186	6,860	39.9%
Unrestricted	308,554	328,893	(20,339)	(6.2%)
Total Net Position	\$ 1,529,567	\$ 1,453,145	\$ 76,422	5.3%

Management's Discussion and Analysis

During 2018, net position increased by \$76,421,849. The majority of this increase was due to the following:

- Net capital assets increased by \$160,780,336 due to construction in progress and additions to the sewer system and wastewater treatment systems.
- Total long-term obligations increased by \$49,193,742. Additions of \$102,642,294 were for WPCLF. There was a \$5,602,694 increase for net OPEB liability from the restated 2017 amount of \$36,826,620. There was a reduction of \$20,740,879 for the net pension liability.
- Deferred inflows of resources related to pension increased \$13,155,098. The net pension asset increased by \$607,040 and the deferred outflows of resources for pension decreased by \$14,842,862.
- The District's deferred inflows of resources for OPEB increased by \$3,160,701. Increases to deferred outflows of resources for OPEB were \$4,295,564.

In order to further understand what makes up the changes in net position for the current year, the following table gives readers further details regarding the results of activities for 2019.

Condensed Statements of Revenues, Expenses and Changes in Net Position For the Year Ended December 31,

(In Thousands)

					Change	
	2019	1	2018	A	Amount	%
Operating Revenues, Net						
Sewer and Stormwater Service Fees:						
Billing Agents						
City of Cleveland	\$ 348,360	\$	338,467	\$	9,893	2.9%
Other Billing Agents	6,534	-	6,085		449	7.4%
Total Billing Agents	354,894		344,552		10,342	3.0%
Direct Billed Sewer and Stormwater Service Fees	28,538		24,078		4,460	18.5%
Total Sewer and Stormwater Service Fees	383,432		368,630		14,802	4.0%
Other Operating Revenue:						
Septic Tank and Municipal Sludge Fees	673		646		27	4.2%
Miscellaneous	942		747		195	26.1%
Total Other Operating Revenue	1,615		1,393		222	15.9%
Total Operating Revenues, Net	385,047		370,023		15,024	4.1%
Non-Operating Revenues						
Interest Revenue	7,844		5,573		2,271	40.8%
Federal Subsidy Revenue	4,801		6,497		(1,696)	(26.1%)
Non-Operating Grant Revenue	-		522		(522)	(100.0%)
Increase in Fair Value of Investments, Net	 605		379		226	(59.6%)
Total Non-Operating Revenues	13,250		12,971		279	2.2%
Total Revenues	\$ 398,297	\$	382,994	\$	15,303	4.0%

Management's Discussion and Analysis

Condensed Statements of Revenues, Expenses and Changes in Net Position For the Year Ended December 31, (continued)

(In Thousands)

Change

			-		Change	e	
		2019	2018	Amount		%	
Operating Expenses							
Salaries and Wages	\$	57,081	\$ 55,333	\$	1,748	3.2%	
Fringe Benefits		41,190	31,917		9,273	29.1%	
Utilities		12,249	14,730		(2,481)	(16.8%)	
Professional and Contractual Services		60,191	55,728		4,463	8.0%	
Other		9,956	6,465		3,491	54.0%	
Depreciation		80,474	71,733		8,741	12.2%	
Total Operating Expenses		261,141	 235,906		25,235	10.7%	
Non-Operating Expenses							
Interest Expense on Long-Term Debt		60,976	59,784		1,192	2.0%	
Non-Operating Grant Expenses		178	4		174	4350.0%	
Green Infrastructure Program		2,102	1,362		740	54.3%	
Member Community Infrastructure Community Program		2,331	4,912		(2,581)	(52.5%)	
Stormwater Community Cost Share Disbursement		8,512	4,218		4,294	101.8%	
Loss on Disposals of Equipment	_	649	386		263	68.1%	
Total Non-Operating Expenses		74,748	70,666		4,082	5.8%	
Total Expenses		335,889	306,572		29,317	9.6%	
Change in Not Position		62 409	76 422		(14.014)	(19.20/)	
Change in Net Position		62,408	 76,422		(14,014)	(18.3%)	
Net Position at Beginning of Year		1,529,567	 1,453,145		76,422	5.3%	
Net Position at End of Year	\$	1,591,975	\$ 1,529,567	\$	62,408	4.1%	

Operating revenues, net consist mainly of user charges for sewage and stormwater service fees. Sewage service fees are based on water consumption and stormwater service fees are based on the square footage of impervious surface area on a parcel of land. Operating expenses reflect the cost of providing these services. For the year ended December 31, 2019:

- Operating revenues increased by \$15,023,851 (4.1%) compared to 2018. The increase was due to higher sewer billing rates in 2019 and customer accounts.
- Non-operating revenues increased by \$278,920 (2.2%). Non-operating revenues consist of interest revenue, the change in fair value of investments, grant revenue and Federal subsidy revenue. Interest revenue increased by \$2,270,429 (40.8%) due to an increase in investments. The fair value of investments for 2019 increased by \$226,159 (59.6%). Non-operating grant revenue decreased by \$521,873 (100%). Federal subsidy revenue decreased by \$1,695,795 (26.1%) due to the 2010 bond refunding.
- Operating expenses increased \$25,233,876 (10.7%) compared to 2018. Main components of operating expenses are as follows:
 - Salary and wages increased \$1,748,383 (3.2%) due to new positions for both the wastewater and stormwater programs and general salary increases.
 - Fringe benefits increased \$9,272,109 (29.1%) due to the increase in health care costs, increased pension expense for OPERS and OPEB and medical expenses.

Management's Discussion and Analysis

- Utilities decreased \$2,480,885 (16.8%) mainly due to Wastewater Treatment Plants, EMSC and GJM consuming less power. Decrease is also due to ongoing sustainability efforts and negotiated reduced power rates from recent contract negotiations. Natural gas decreased by \$403,760 (23.9%) also due to facilities using less gas and to ongoing sustainability efforts.
- Professional and contractual services increased \$4,463,366 (8.0%) due to ongoing and newly awarded Stormwater projects.
- Other expenses increased due the net effect of the changes of its subcategory expenses. Software expense increased \$474,463 (24.1%) due to Global Information System (GIS) mapping, Human Resources Time Management, Financial and database software renewals. Chemicals increased \$514,644 (19.7%) due to sodium hydroxide, ferric chloride solution and polymer use for the plants. Repair and Maintenance expenses increased \$407,559 (14.4%) due to Substation repairs at Southerly plants and HVAC maintenance at various District facilities. Judgments expense decreased \$717,738 (98.9%) due to a non-recurring agreement payout to the City of North Royalton in 2018.
- Non-operating expenses increased \$4,082,631 (5.8%) due to increases in stormwater community cost-share reimbursements, green infrastructure payments and an increase in interest expense on long-term debt. Interest expense increased by \$1,191,615 (2.0%).

The following table on the next page summarizes the changes in revenues and expenses for the District between 2018 and 2017.

Condensed Statements of Revenues, Expenses and Changes in Net Position For the Year Ended December 31,

(In Thousands)

		-		 Change	
	2018		2017	 Amount	%
Operating Revenues, Net					
Sewer and Stormwater Service Fees:					
Billing Agents					
City of Cleveland	\$ 338,467	\$	311,617	\$ 26,850	8.6%
Other Billing Agents	 6,085		6,082	3	0.0%
Total Billing Agents	344,552		317,699	26,853	8.5%
Direct Billed Sewer and Stormwater Service Fees	24,078		23,614	464	2.0%
Total Sewer and Stormwater Service Fees	368,630		341,313	27,317	8.0%
Other Operating Revenue:					
Septic Tank and Municipal Sludge Fees	646		616	30	4.9%
Miscellaneous	747		1,951	(1,204)	(61.7%)
Total Other Operating Revenue	1,393		2,567	 (1,174)	(45.7%)
Total Operating Revenues, Net	370,023		343,880	26,143	7.6%
Non-Operating Revenues					
Interest Revenue	5,573		3,833	1,740	45.4%
Proceeds from Insurance Claim	-		7	(7)	(100.0%)
Federal Subsidy Revenue	6,497		6,473	24	0.4%
Non-Operating Grant Revenue	522		207	315	152.2%
Increase (Decrease) in Fair Value of Investments, Net	379		(518)	 897	173.2%
Total Non-Operating Revenues	12,971		10,002	2,969	29.7%
Total Revenues	\$ 382,994	\$	353,882	\$ 29,112	8.2%

Management's Discussion and Analysis

Condensed Statements of Revenues, Expenses and Changes in Net Position For the Year Ended December 31, (continued)

(In Thousands)

					Change	e	
		2018	2017		Amount	%	
Operating Expenses							
Salaries and Wages	\$	55,333	\$ 53,498	\$	1,835	3.4%	
Fringe Benefits		31,917	29,418		2,499	8.5%	
Utilities		14,730	13,602		1,128	8.3%	
Professional and Contractual Services		55,728	51,715		4,013	7.8%	
Other		6,465	4,697		1,768	37.6%	
Depreciation		71,733	71,497		236	0.3%	
Total Operating Expenses		235,906	224,427		11,479	5.1%	
Non-Operating Expenses							
Interest Expense on Long-Term Debt		59,784	58,980		804	1.4%	
Non-Operating Grant Expenses		4	98		(94)	(95.9%)	
Green Infrastructure Program		1,362	1,319		43	3.3%	
Member Community Infrastructure Community Program		4,912	3,119		1,793	57.5%	
Stormwater Community Cost Share Disbursement		4,218	2,626		1,592	60.6%	
Loss on Disposals of Equipment		386	301		85	28.2%	
Total Non-Operating Expenses		70,666	66,443		4,223	6.4%	
Total Expenses		306,572	290,870		15,702	5.4%	
Change in Net Position		76,422	 63,012		13,410	21.3%	
Net Position at Beginning of Year							
- Restated		1,453,145	N/A		N/A	N/A	
Net Position at End of Year	\$	1,529,567	\$ 1,453,145	\$	76,422	5.3%	

Operating revenues, net consist mainly of user charges for sewage and stormwater service fees. Sewage service fees are based on water consumption and stormwater service fees are based on the square footage of impervious surface area on a parcel of land. Operating expenses reflect the cost of providing these services. For the year ended December 31, 2018:

- Operating revenues increased by \$26,143,198 (7.6%) compared to 2017. The increase was due to higher sewer billing rates in 2018 and an increase in billed consumption of 1.3%.
- Non-operating revenues increased by \$2,968,893 (29.7%). Non-operating revenues consist of interest revenue, the change in fair value of investments, grant revenue, proceeds on insurance claims and Federal subsidy revenue. Interest revenue increased by \$1,739,990 (45.4%) due to an increase in investments. The fair value of investments for 2018 increased by \$896,752 (173.2%). Non-operating grant revenue increased by \$314,968 (152.2%). Federal subsidy revenue increased by \$24,295 (0.4%).
- Operating expenses increased \$11,479,733 (5.1%) compared to 2017. Main components of operating expenses are as follows:
 - Salary and wages increased \$1,834,644 (3.4%) due to new positions for both the wastewater and stormwater programs and general salary increases.
 - Fringe benefits increased \$2,499,146 (8.5%) due to the increase in healthcare and short-term disability claims, increased pension expense for OPERS and OPEB and medical expenses.

Management's Discussion and Analysis

- Utilities increased \$1,128,252 (8.3%) mainly due to an increase in electricity by \$1,164,604 (11.6%) caused by Easterly Plant construction during 2017 and coming back online in 2018. Communications decreased by \$247,170 (23.2%).
- Professional and contractual services increased \$4,012,381 (7.8%) due to ongoing and newly awarded Stormwater projects.
- Other expenses increased due the net effect of the changes of its subcategory expenses. Judgments expense increased \$717,435 (8,641.2%) due to an agreement payout to the City of North Royalton. Software expense increased \$638,685 (48.1%) due to Oracle EBS and database licenses. Chemicals increased \$554,369 (26.9%) due to sodium hydroxide, ferric chloride solution and polymer use for the plants.
- Non-operating expenses increased \$4,223,202 (6.4%) due to increases in stormwater community cost-share reimbursements, member community and green infrastructure payments. Non-operating grant expense decreased \$93,199 (94.9%). Interest expense increased by \$804,000 (1.4%).

Capital Assets

At December 31, 2019, capital asset balances were as follows compared to 2018. Refer to Notes 2 and 5 of the audited financial statements for more detailed information on capital assets.

Capital Assets at December 31, 2019 and 2018 (Net of Depreciation, in Thousands)

			 Change	<u> </u>
	2019	2018	Amount	%
Land	\$ 35,707	\$ 28,860	\$ 6,847	23.7%
Construction in Progress	666,422	544,007	122,415	22.5%
Interceptor Sewer Lines	1,286,502	1,282,320	4,182	0.3%
Buildings, Structures and Improvements and Equipment	618,870	621,090	(2,220)	(0.4%)
Sewage Treatment and Other Equipment	362,049	354,040	8,009	2.3%
Right to Use-Intangible	4,217	 4,401	 (184)	(4.2%)
Total	\$ 2,973,767	\$ 2,834,718	\$ 139,049	4.9%

	 Amount
Major Additions Placed into Service in 2019, at Cost Included:	
Southerly 1st Stage Aeration Tank and Return Sludge PS Improvements	\$ 17,937
Woodland Central Green Infrastructure Project	13,103
Southerly 2nd Stage Lift Station Improvements	13,076
Southerly Building Heat Boilder System Upgrades	8,057
GBGI/Union Buckeye Green Infrastructure	6,680
Dugway Regulator & Relief Sewers	5,780
Stormwater Capital Land	5,192
District Energy Conservation	3,708
Westerly Fire Safety & Code	3,061
Woodland Avenue Storm Sewer	3,055
Easterly Grease Handling Improvements	2,423
UPS Upgrades (APM)	1,689
Superior-Stones-Canal CSO Improvements	1,462
GJM Interior Renovations	 1,280
	\$ 86,503

Management's Discussion and Analysis

Capital Assets

At December 31, 2018, capital asset balances were as follows compared to 2017. Refer to Notes 2 and 5 of the audited financial statements for more detailed information on capital assets.

Capital Assets at December 31, 2018 and 2017 (Net of Depreciation, in Thousands)

				Change	•
	2018	2017		Amount	%
Land	\$ 28,860	\$ 25,112	\$	3,748	14.9%
Construction in Progress	544,007	744,323		(200,316)	(26.9%)
Interceptor Sewer Lines	1,282,320	1,014,772		267,548	26.4%
Buildings, Structures and Improvements and Equipment	621,090	547,118		73,972	13.5%
Sewage Treatment and Other Equipment	354,040	338,029		16,011	4.7%
Right to Use-Intangible	4,401	 4,584		(183)	(4.0%)
Total	\$ 2,834,718	\$ 2,673,938	\$	160,780	6.0%

	 Amount
Major Additions Placed into Service in 2018, at Cost Included:	
Euclid Creek Storage Tunnel	\$ 218,902
Easterly Tunnel Dewatering Pump Station	91,793
Dugway South Relief and Consolidation Sewer	27,552
Superior-Stones-Canal CSO Improvements	21,114
Kingsbury Run Culvert Repair	12,336
Westerly Low Level Interceptor Relief Sewer	11,670
Kingsbury Run Preliminary Engineering Project	7,852
Easterly Service and Security Building Project	6,064
Westerly Wet Weather Facility Improvements	4,375
S-75/S-76 Stormwater Outlet Replacement	3,379
Westerly Incinerator Improvements	3,060
First Stage FST 1-10 Improvements	2,333
CSO- 236 SWO Relocation	1,638
Easterly Chemical Storage and Feed Facility	1,470
EMSC Building Interior Renovation	1,426
Southerly Grit Removal System	 1,345
	\$ 416,309

Debt Administration

At December 31, 2019, the District had total debt outstanding of \$1,780,853,538. This represents an increase of \$113,229,584 for total debt from 2018 due to the issuance of new loans from the Ohio Water Development Authority Water Pollution Control Loan Fund which had increased by \$111,646,198 and issuance of the new 2019 Refunding Bonds in the amount of \$245,005,000 and a premium on those bonds of \$20,461,301; total debt payments were \$296,994,935, of which \$251,720,000 was for defeasance of the 2010 bonds and \$45,274,935 for retirement of loans. The carrying value of the long-term portion of debt at December 31, 2019 was \$1,735,517,503 and the fair value of the long-term debt was \$2,014,226,462.

Management's Discussion and Analysis

At December 31, 2018, the District had total debt outstanding of \$1,667,623,954. This represents an increase of \$67,582,643 for total debt from 2017 due to the issuance of new loans from the Ohio Water Development Authority Water Pollution Control Loan Fund which had increased by \$80,191,005; total debt retirements were \$42,276,743, of which \$35,111,743 was for the retirement of loans. The carrying value of the long-term portion of debt at December 31, 2018 was \$1,623,078,574 and the fair value of the long-term debt was \$1,752,465,182.

This information should be read in conjunction with Note 6 to the audited financial statements for more detailed information on long-term debt.

Outstanding Debt at December 31,

(In Thousands)

	2019	2018	2017
Revenue Bonds	\$ 1,073,331	\$ 1,071,748	\$ 1,084,356
Water Pollution Loans Payable	707,522	595,876	515,685
Total Debt	\$ 1,780,853	\$ 1,667,624	\$ 1,600,041

Economic Factors

In August 2016, the Board of Trustees approved rate increases scheduled for the years 2017 through 2021. Increasingly stringent federal regulations and remaining legal obligations are key factors that led to these rate increases. A rate study of a projected five-year period concluded that the need to finance over \$1.1 billion in federally mandated capital projects between 2017 and 2021, combined with the repayment of existing debt service for past projects and an anticipated decrease in billed consumption, necessitated the rate increases during 2017, the District's billing cycle was changed from quarterly billing to monthly billing. Effective January 1, 2018, rates charged to District customers increased to \$88.40 per mcf for City of Cleveland customers, and to \$89.60 per mcf for the suburban customers. Also, effective January 1, 2018, the fixed fee was increased to \$4.95 per month for regular customers and \$2.95 per month for Homestead/Affordability customers. Effective January 1, 2019, rates charged to District customers increased to \$94.15 per mcf for City of Cleveland customers, and to \$95.05 per mcf for the suburban customers. Also, effective January 1, 2019, the fixed fee was increased to \$6.35 per month for regular customers and \$3.80 per month for Homestead/Affordability customers.

Contacting the District's Financial Management

This financial report is designed to provide a general overview of the District's finances for all interested parties. Questions and requests for additional information regarding this report should be addressed to the Chief Financial Officer, Northeast Ohio Regional Sewer District, 3900 Euclid Avenue, Cleveland, Ohio 44115, by telephone at (216) 881-6600, or at www.neorsd.org.

Statements of Net Position

December 31, 2019 and 2018

Assets

1155015		
	2019	2018
Current Assets:		
Cash	\$ 28,776,172	\$ 8,536,761
Stormwater Cash	10,634,303	25,820,540
Stormwater Community Cost-Share Cash	25,911,002	24,045,802
Short-Term Investments	283,175,085	266,657,736
Sewage Service Fees Receivable, Less Allowance for Doubtful		
Accounts of \$23,800,000 in 2019 and \$23,600,000 in 2018	113,046,321	112,397,409
Stormwater Service Fees Receivable, Less Allowance for Doubtful		
Accounts of \$651,000 in 2019 and \$604,000 in 2018	16,387,457	15,123,498
Receivables from Federal, State and Other Agencies	23,347,757	30,852,146
Inventory, Prepaid Expenses and Other	8,661,489	8,671,856
Total Current Assets	509,939,586	492,105,748
N		
Noncurrent Assets:		
Capital Assets:	1 (14 054 0()	1 507 441 073
Interceptor Sewer Lines	1,614,954,066	1,587,441,872
Buildings, Structures and Improvements and Equipment	1,185,515,445	1,157,328,957
Sewage Treatment and Other Equipment	655,935,613	644,560,640
Right to Use - Intangible	5,505,574 3,461,910,698	5,505,574 3,394,837,043
Lagar Accumulated Dannaciation		
Less: Accumulated Depreciation	(1,190,272,875)	(1,132,985,596)
T 1	2,271,637,823	2,261,851,447
Land	35,706,856	28,859,749
Construction in Progress	666,422,074	544,006,768
Net Capital Assets	2,973,766,753	2,834,717,964
Long-Term Investments	29,375,868	9,996,486
Revenue Bond Debt Service Deposit - restricted	12,759,244	14,218,413
Net Pension Asset	709,645	931,953
Total Noncurrent Assets	3,016,611,510	2,859,864,816
Total Assets	3,526,551,096	3,351,970,564
Deferred Outflows of Resources:		
Pension	30,377,342	16,707,750
OPEB	5,028,738	4,898,449
Deferred Charge on Bond Refunding	25,612,660	15,654,149
Total Deferred Outflows of Resources	61,018,740	37,260,348
Total Assets and Deferred Outflows of Resources	\$ 3,587,569,836	\$ 3,389,230,912

Continued

Statements of Net Position (Continued)

December 31, 2019 and 2018

Liabilities and Net Position

	2019	2018
Liabilities:		
Current Liabilities:		
Accounts Payable	\$ 13,785,351	\$ 16,372,681
Construction Contracts and Retainages Payable	32,399,020	38,084,936
Accrued Interest Payable	10,989,427	11,932,893
Other Accrued Liabilities	7,224,884	9,118,425
Current Maturities of Long-Term Debt	45,336,035	44,545,380
Total Current Liabilities	109,734,717	120,054,315
Noncurrent Liabilities:		
Long-Term Debt	1,735,517,503	1,623,078,574
Net Pension Liability	97,078,586	56,918,326
Net OPEB Liability	49,956,323	42,429,314
Other Accrued Long-Term Liabilities	<u> </u>	200,000
Total Noncurrent Liabilities	1,882,552,412	1,722,626,214
Total Liabilities	1,992,287,129	1,842,680,529
Deferred Inflows of Resources:		
Pension	2,562,686	13,823,333
OPEB	745,559	3,160,701
Total Deferred Inflows of Resources	3,308,245	16,984,034
Total Liabilities and Deferred Inflows of Resources	1,995,595,374	1,859,664,563
Net Position:		
Net Investment in Capital Assets	1,231,285,119	1,196,966,572
Restricted -Stormwater Community Cost-Share	25,911,002	24,045,802
Unrestricted	334,778,341	308,553,975
Total Net Position	\$ 1,591,974,462	\$ 1,529,566,349

Statements of Revenues, Expenses and Changes in Net Position

For the Years Ended December 31, 2019 and 2018

	2019	2018
Operating Revenues - Sewage:		
Billing Agents	\$ 310,986,925	\$ 301,523,258
Direct Billed	27,610,406	23,142,825
Other	1,615,509	1,392,876
Total Operating Revenues - Sewage	340,212,840	326,058,959
Operating Revenues - Stormwater:		
Billing Agents	43,907,185	43,029,033
Direct Billed	927,462	935,644
Total Operating Revenues - Stormwater	44,834,647	43,964,677
Total District's Operating Revenues, Net	385,047,487	370,023,636
Operating Expenses - Sewage:		
Salaries and Wages	53,823,645	52,726,122
Fringe Benefits	40,663,563	31,535,641
Utilities	12,248,936	14,729,821
Professional and Contractual Services	25,952,405	32,255,207
Other	9,846,136	5,708,698
Stormwater Indirect Cost Allocation	(4,186,298)	(3,974,441)
Depreciation	80,473,794	71,733,140
Total Operating Expenses - Sewage	218,822,181	204,714,188
Operating Expenses - Stormwater:		
Salaries and Wages	3,257,406	2,606,546
Fringe Benefits	526,322	382,135
Professional and Contractual Services	34,238,683	23,472,515
Other	109,590	756,779
Stormwater Indirect Cost Allocation	4,186,298	3,974,441
Total Operating Expenses - Stormwater	42,318,299	31,192,416
Total District's Operating Expenses	261,140,480	235,906,604
Operating Income	123,907,007	134,117,032
Non-Operating Revenues (Expenses):	7.042.502	5 550 054
Interest Revenue	7,843,503	5,573,074
Increase in Fair Value of Investments, Net	604,848	378,689
Non-Operating Grant Revenue	- (1	521,873
Non-Operating Grant Expenses	(177,781)	(4,534)
Green Infrastructure Program	(2,102,179)	(1,361,640)
Member Community Infrastructure Program	(2,331,313)	(4,911,520)
Stormwater Community Cost Share Disbursement	(8,511,830)	(4,218,308)
Loss on Disposals of Equipment	(649,659)	(385,744)
Interest Expense on Long-Term Debt	(60,975,839)	(59,784,224)
Federal Subsidy Revenue	4,801,356	6,497,151
Total Non-Operating Revenues (Expenses), Net	(61,498,894)	(57,695,183)
Change in Net Position	62,408,113	76,421,849
Net Position at Beginning of Year	1,529,566,349	1,453,144,500
Net Position at End of Year	\$ 1,591,974,462	\$ 1,529,566,349

Statements of Cash Flow

For the Years Ended December 31, 2019 and 2018

Cook Flores Conserving Anti-Mine	2019	2018
Cash Flows from Operating Activities Cash Received From Customers	\$ 375,014,077	\$ 356,660,451
Cash Payments to Suppliers for Goods and Services	(66,032,171)	(62,708,879)
Cash Payments to Employees for Services	(100,593,129)	(88,361,455)
Net Cash Provided by Operating Activities	208,388,777	205,590,117
Cash Flows From Investing Activities		
Purchases of Investments	(359,204,868)	(274,020,141)
Proceeds from Maturities of Investments	325,482,662	306,307,478
Interest on Investments	7,732,994	5,790,348
Net Cash (Used) Provided by Investing Activities	(25,989,212)	38,077,685
Cash Flows From Non-Capital Financing Activities		
Grant Payments	(177,781)	(4,534)
Grants Received	25,000	590,477
Member Community Infrastructure Program Expenditures	(1,531,853)	(3,152,387)
Green Infrastructure Program Expenditures	(1,673,529)	(591,172)
Net Cash Used by Non-Capital Financing Activities	(3,358,163)	(3,157,616)
Cash Flows From Capital and Related Financing Activities		
Principal Payments on Long-Term Debt	(44,781,031)	(42,096,453)
Interest Payments on Long-Term Debt	(52,686,162)	(58,279,568)
Proceeds from Issuance of Series 2019 Refunding Bonds	245,005,000	-
Premium on 2019 Refunding Bonds	20,461,301	-
Defeasance of Series 2010 Bonds	(269,182,083)	-
Bond Issuance Costs	(500,790)	-
Underwriter Discount Fees	(1,038,428)	-
Proceeds from Water Pollution Control Loans	156,457,322	102,642,294
Proceeds on Sale of Capital Assets	153,975	59,879
Acquisition and Construction of Capital Assets	(226,012,132)	(225,369,580)
Net Cash Used by Capital and Related Financing Activities	(172,123,028)	(223,043,428)
Net Increase in Cash and Stormwater Cash	6,918,374	17,466,758
Cash at Beginning of Year	8,536,761	4,060,452
Stormwater Cash at Beginning of Year	25,820,540	19,690,139
Stormwater Community Cost-share Cash at Beginning of Year	24,045,802	17,185,754
Cash at End of Year	\$ 65,321,477	\$ 58,403,103

Continued

Statements of Cash Flow (Continued)

For the Years Ended December 31, 2019 and 2018

		2019	2018			
Reconciliation of Operating Income to Cash Provided By Operating Activities:						
Operating Income	\$	123,907,007	\$	134,117,032		
Adjustments to Reconcile Operating Income to Net Cash Provided by						
Operating Activities:						
Depreciation		80,473,794		71,733,140		
Allowance for Doubtful Accounts		247,000		(3,664,000)		
Changes in Operating Assets and Liabilities:						
Accounts Receivable		(10,280,410)		(9,699,185)		
Deferred Outflows of Resources - Pension		(13,669,592)		14,842,862		
Deferred Inflows of Resources - Pension		(11,260,647)		13,155,098		
Deferred Outflows of Resources - OPEB		(130,289)		(4,295,564)		
Deferred Inflows of Resources - OPEB		(2,415,142)		3,160,701		
Net Pension Asset		222,308		(607,040)		
Net Pension Liability		40,160,260		(20,740,879)		
Net OPEB Liability		7,527,009		5,602,694		
Inventory and Prepaid Expenses		10,367		(757,138)		
Accounts Payable and Other Accrued Liabilities		(6,402,888)		2,742,396		
Total Adjustments		84,481,770		71,473,085		
Net Cash Provided by Operating Activities	\$	208,388,777	\$	205,590,117		
Supplemental Schedule of Non-Cash Investing, Capital and						
Relating Financing Activities						
Long-Term Debt (Decreased) Increased for Receivables from State						
Agencies in Connection with Water Pollution Control Loans	\$	(6,411,189)	\$	12,660,454		
Long-Term Debt Increased due to Accrued Construction Interest						
in Connection with Water Pollution Control Loans	\$	3,545,256	\$	2,324,738		
Long-Term Debt Decreased due to Accrued Construction Principal						
Adjustment in Connection with Water Pollution Control Loans	\$	(493,904)	\$	(180,290)		
	Φ.	(0.55.555)	#	(111.5.5)		
Build America Bonds Subsidy Adjustment	\$	(966,663)	\$	(444,250)		
Capital Assets (Decreased) Increased due to Capitalized Costs,	¢	(5 (05 016)	¢	7.500.531		
Recorded Accounts Payable and Asset Reclassifications	\$	(5,685,916)	\$	7,589,521		
Increase in Fair Value of Investments, Net	\$	604,848	\$	378,689		
Amortization of Deferred Charge on Bond Refunding	\$	1,185,939	\$	4,399,753		
Amortization of Bond Premium and Discount	\$	(5,287,915)	\$	(5,443,364)		

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 1: Reporting Entity

The Northeast Ohio Regional Sewer District (the "District"), a political subdivision of the State of Ohio, was created by Order of the Cuyahoga County Court of Common Pleas and commenced operations on July 18, 1972, under statutory provisions of the Ohio Revised Code. The District provides wastewater treatment and interceptor sewer facilities for the region comprised of the City of Cleveland and 62 suburban communities.

The District is governed by its Board of Trustees (the "Board"). The Board consists of seven members, each of whom serves a five-year term and who are appointed as follows: (i) two by the Mayor of the City of Cleveland (subdistrict one); (ii) two by a council of governments (the "Suburban Council") comprised of representatives of all the suburban communities served by the System (subdistrict two); (iii) one by the Cuyahoga County Council; (iv) one by the appointing authority of the subdistrict with the greatest sewage flow (currently the Mayor of the City of Cleveland); and (v) one by the appointing authority of the subdistrict with greatest population (currently the Suburban Council). Accordingly, the Mayor of the City of Cleveland and the Suburban Council each currently appoint three members of the Board.

In accordance with the provisions of Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity*, and GASB Statement No. 39, *Determining Whether Certain Organizations are Component Units* (an amendment of GASB Statement No. 14), the accompanying financial statements include only the accounts and transactions of the District. Under the criteria specified in these GASB Statements, the District has no component units nor is it considered a component unit of the State of Ohio. The District is considered, however, a political subdivision to the State of Ohio. These conclusions regarding the financial reporting entity are based on the concept of financial accountability. The District is not financially accountable for any other organizations. This is evidenced by the fact that the District is a legally and fiscally separate and distinct organization. The annual budget is submitted to Cuyahoga County for informational purposes only and does not require its approval. The District is solely responsible for its finances. The District is empowered to issue revenue bonds payable solely from sewer charge revenues.

Component units are legally separate organizations for which the District is financially accountable. The District is financially accountable for an organization if it appoints a voting majority of the organization's governing board and (1) is able to significantly influence the programs or services performed or provided by the organization; or (2) is legally entitled to or can otherwise access the organization's resources; is legally obligated or has otherwise assumed the responsibility to finance deficits of or provide financial support to the organization; or is obligated for the debt of the organization. Based upon the application of these criteria, the District has no component units.

Note 2: Summary of Significant Accounting Policies

The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, as prescribed by the GASB. The statements were prepared using the economic resources measurement focus and the accrual basis of accounting. All transactions are accounted for in a single proprietary (enterprise) fund.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The more significant of the District's accounting policies are described below.

Basis of Presentation

The District's basic financial statements consist of statements of net position; statements of revenues, expenses and changes in net position; and statements of cash flow.

The District uses a single enterprise fund to maintain its financial records during the year. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts.

Enterprise fund reporting focuses on the determination of the change in net position, financial position and cash flows. An enterprise fund may be used to account for any activity for which a fee is charged to external users for goods and services.

Measurement Focus

The enterprise fund is accounted for on a flow of economic resources measurement focus. All assets and deferred outflows of resources and all liabilities and deferred inflows of resources associated with the operation of the District are included on the statements of net position. The statements of revenues, expenses and changes in net position present increases (i.e., revenues) and decreases (i.e., expenses) in total net position. The statements of cash flows provide information about how the District finances and meets the cash flow needs of its enterprise activity.

Basis of Accounting

Basis of accounting determines when transactions are recorded in the financial records and reported on the financial statements. The District's financial statements are prepared using the accrual basis of accounting.

Revenue is recorded on the accrual basis when the exchange takes place. Contribution revenue is primarily recognized on a cost-reimbursement basis or in accordance with the terms of grant agreements. Expenses are recognized at the time they are incurred.

Reclassifications

Certain amounts in the prior year financial statements have been reclassified to conform to the current year presentation. This reclassification did not impact net position totals.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Cash Equivalents and Investments

The District's policy is to treat all of its short-term, highly liquid investments as investments, and not as cash equivalents.

Except for non-participating investment contracts, investments are reported at fair value which is based on quoted market prices. Non-participating investment contracts, such as non-negotiable certificates of deposit, are reported at cost plus accrued interest.

STAR Ohio, is an investment pool managed by the State Treasurer's Office which allows governments within the state to pool their funds for investment purposes. STAR Ohio is not registered with the SEC as an investment company, but the District has adopted Governmental Accounting Standards Board (GASB), Statement No.79, *Certain External Investment Pools and Pool Participants*. The District measures their investment in STAR Ohio at amortized cost.

For the years ended December 31, 2019 and 2018, there were no limitations or restrictions on any participant withdrawals due to redemption notice periods, liquidity fees, or redemption gates. However, notice must be given 24 hours in advance of all deposits and withdrawals exceeding \$25 million. STAR Ohio reserves the right to limit the transaction to \$50 million, requiring the excess amount to be transacted the following business day(s), but only to the \$50 million limit. All accounts of the participant will be combined for these purposes.

Short-Term Investments

Short-term investments consist of non-negotiable certificates of deposit, obligations of Federal agencies, and STAR Ohio

Fair Value of Financial Instruments

Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and, therefore, cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Cash

The carrying value approximates fair value due to the short maturity of this financial instrument.

Investments

The carrying value of the District's investments in U.S. Treasury Securities, and obligations of Federal Agencies, is fair value in accordance with the application of GASB Statement No. 31. The carrying value of the District's certificates of deposit approximate fair value due to the relative short maturities of these financial instruments.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Fair Value of Financial Instruments (continued)

Long-Term Debt

The fair value of the District's long-term debt is estimated based on the borrowing rates currently available to the District for loans with comparable maturities. The estimated fair value of the District's long-term debt, net of the current portion, at December 31, 2019 was \$2,014,226,462. The estimated fair value of the District's long-term debt, net of the current portion, at December 31, 2018 was \$1,752,465,182.

Long-Term Investments and Restricted Accounts

In conjunction with the issuance of its revenue bonds, the District maintains funds in the following special accounts:

Long-Term Investments

At December 31, 2019 and 2018, these funds consisted of U.S. Treasury Securities and obligations of Federal agencies. They may be used to finance construction expenditures approved by the Board of Trustees. Under certain circumstances, the funds may be used for repayment of principal and interest costs on the 2010 Series Wastewater Improvement Revenue Bonds, the 2013 Series Wastewater Improvement Revenue Bonds, the 2014 Series Wastewater Improvement Revenue Refunding Bonds, the 2016 Series Wastewater Improvement Revenue Refunding Bonds, the 2017 Series Wastewater Improvement Revenue Refunding Bonds and the 2019 Series Wastewater Improvement Revenue Refunding Bonds.

Revenue Bond Debt Service Deposit

These amounts represent advance deposits made to the District's bond trustee for principal and interest payments on revenue bonds. Investments at December 31, 2019 and 2018 consisted of direct obligations of the United States Government, money market funds plus accrued interest.

Sewage and Stormwater Service Fees Receivable

Sewage and stormwater service fees receivable are shown net of an allowance for uncollectibles. The allowance is based on aged accounts receivable, historical collection rates, economic trends, and current year operating revenues. The allowance amounts are \$24,451,000 and \$24,204,000 at December 31, 2019 and 2018, respectively.

Inventory

Inventory consists of materials and supplies not yet placed into service that are valued at weighted average cost. The cost of inventory items is recognized as an expense when used.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Capital Assets

Capital assets which include property, plant, equipment, and infrastructure assets (e.g. sewer lines and similar items) are reported on the statements of net position. All capital assets are capitalized at cost (or estimated historical cost) and updated for additions and retirements during the year. Northeast Ohio Regional Sewer District maintains a capitalization threshold of \$10,000. Major renewals and betterments are capitalized; the costs of normal improvements and repairs that do not add to the value of the assets or materially extend an asset's life are expensed as incurred. All reported capital assets except for land and construction in progress are depreciated. Major renewals and betterments are depreciated over the remaining useful lives of the related capital assets. Depreciation is computed using the straight-line method over the following useful lives:

Description

Interceptor Sewer Lines
Buildings, Structures and Improvements and Equipment
Sewage Treatment and Other Equipment
Right to Use-Intangible

Estimated Lives
Primarily 75 years
Primarily 40 years
5 to 20 years
30 years

Bond Premiums

Bond premiums are deferred and amortized over the term of the bonds using the effective-interest method. Unamortized bond premiums are presented as an increase of the carrying amount of the bonds payable reported on the statements of net position.

Bond Discounts

Bond discounts are amortized over the term of the bonds using effective-interest method. Unamortized bond discounts are presented as a reduction to the face amount of the bonds reported on the statements of net position.

Deferred Outflows of Resources

In addition to assets, the statements of financial position will sometimes report a separate section for deferred outflows of resources. Deferred outflows of resources represent a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until then. For the District, deferred outflows of resources are reported on the statements of net position as deferred charge on refunding, future pension and other postemployment benefit (OPEB) obligations. The deferred outflows of resources related to pension and OPEB plans are explained, respectively, in Note 7 and Note 8. On the District financial statements, the difference between the reacquisition price (funds required to refund the old debt) and the net carrying amount of the old debt, the gain/loss on refunding, is being amortized as a component of interest expense. This deferred amount is amortized over the life of the old or new debt, whichever is shorter, using the effective-interest method and is presented as deferred outflows of resources on the statements of net position.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Deferred Inflows of Resources

In addition to liabilities, the statements of financial position will sometimes report a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net position that applies to a future period and will not be recognized until that time. For the District, deferred inflows of resources include changes in net pension and net OPEB obligations. Deferred inflows of resources related to pensions and OPEB are reported on the government-wide statements of net position and explained, respectively, in Notes 7 and 8.

Pensions/Other Postemployment Benefits (OPEB) Liabilities (Assets)

For purposes of measuring the net pension/OPEB liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions/OPEB, and pension/OPEB expense, information about the fiduciary net position of the pension/OPEB plans and additions to/deductions from their fiduciary net position have been determined on the same basis as they are reported by the pension/OPEB systems. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension/OPEB systems report investments at fair value. Additional details on the pension/OPEB systems are provided in Notes 7 and 8, respectively.

Capital Contributions

Contributions of capital arise from outside contributions of capital assets or from grants or outside contributions of resources restricted to capital acquisition and construction.

Net Position

In the District financial statements, net position is categorized into three categories. The first is net investment in capital assets, reduced by accumulated depreciation and any outstanding debt incurred to acquire, construct or improve those assets excluding unexpended bond proceeds, committed or unrestricted. This category represents net investment in property, plant, equipment and infrastructure. The second category is restricted by requirements of revenue bonds, other externally imposed constraints, or by legislation, in excess of the related liabilities payable from restricted assets. This category represents Stormwater cash that is Board-restricted for the Community Cost-Share Program. The third category is unrestricted portion of net position, which consists of all assets that do not meet the definition of either of the other two categories of net position. The District applies restricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available.

The District's Board of Trustees adopted a reserve policy in July 2009 that annually designates amounts of the District's unrestricted net position as Board-designated for specific purposes. Such amounts are not restricted and may be designated for other purposes or eliminated at the discretion of the Board of Trustees. A summary of reserve amounts that have been designated by the Board of Trustees at December 31, 2019 and 2018 follows:

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Net Position (continued)

	 2019	2018
General Operating Reserve	\$ 34,399,656	\$ 34,311,096
Equipment Repair and Replacement Reserve	58,625,794	57,672,441
Insurance Reserve	20,160,802	21,004,774
Rate Stabilization Account	18,000,000	18,000,000
Capital Project Account	201,440,401	146,004,997

During 2019, the General Operating Reserve increased by \$88,560 due to an increase in the operating budget compared to 2018. The Equipment Repair and Replacement Reserve increased \$953,353 due to interest revenue. The Insurance Reserve had a net decrease of \$843,972 due to insurance premiums and claims paid in excess of the interest earned. The Rate Stabilization account stayed the same compared to 2018. The Capital Project account increased by \$55,435,404 due to increases in Ohio Water Development Authority (OWDA) loan receipts via the Water Pollution Control Loan Fund (WPCLF) in excess of project expenditures and transfers from the operating account.

During 2018, the General Operating Reserve increased by \$789,524 due to an increase in the operating budget compared to 2017. The Equipment Repair and Replacement Reserve increased \$707,062 due to interest revenue. The Insurance Reserve had a net decrease of \$767,158 due to insurance premiums and claims paid in excess of the interest earned. The Rate Stabilization account stayed the same compared to 2017. The Capital project account decreased by \$27,649,289 due to increases in project expenditures in excess of transfers from the operating account.

Revenues and Expenses

Operating revenues and expenses result from providing wastewater conveyance and treatment and stormwater services. Operating revenues consist of user charges for sewage and stormwater service fees. Sewage service fees are based on water consumption and stormwater service fees are based on the square footage of impervious surface area on a parcel of land. Operating revenues are shown net of bad debt expense of \$5,933,688 in 2019 and \$3,891,613 in 2018. Operating expenses include the cost of these sewer and stormwater services, including administrative expenses and depreciation on capital assets.

Non-operating revenues and expenses are all revenues and expenses not meeting the definition of operating revenues and expenses. Non-operating revenues and expenses include revenues and expenses from investing activities, capital and related financing activities, non-capital financing activities and community contributions.

Sewage service fees are billed to users of the system on a cycle basis based primarily upon water usage. Estimates for services provided between the ends of various cycles and the end of the year are recorded as unbilled revenue. Included in sewage service fees receivable at December 31, 2019 and 2018 are unbilled sewage service fees of \$21,791,217 and \$21,542,054, respectively. Included in stormwater service fees receivable at December 31, 2019 and 2018 are unbilled stormwater service fees of \$2,087,900 and \$2,077,875; respectively.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 2: Summary of Significant Accounting Policies (continued)

Revenues and Expenses (continued)

In August 2016, the Board of Trustees approved rate increases scheduled for the years 2017 through 2021. Effective January 1, 2017, rates charged to customers increased approximately 8.5% for customers in the City of Cleveland, and 8.0% for the suburban customers. In addition to the current volumetric discount rates for the Homestead Program and Affordability programs, the District has expanded the discount by applying it to the Fixed Cost Recovery Charge starting in 2017.

Interest Expense

It is the District's intention that all expenses, including interest incurred in connection with financing the construction of new facilities, be recovered on a current basis. The annual budget process is governed by a number of factors, including the 2010 Wastewater Improvement Revenue Bond Resolution, the 2013 Wastewater Improvement Revenue Bond Resolution, the 2014 Wastewater Improvement Revenue Bond Resolution, the 2016 Wastewater Improvements Revenue Refunding Bond Resolution, the 2017 Wastewater Improvements Revenue Refunding Bond Resolution and the 2019 Wastewater Improvements Revenue Refunding Bond Resolution which requires that the current year "net revenues" be at least 115.0% of its debt service requirements. As the District does not intend that interest costs be recovered from subsequent years' revenue, it has excluded interest as an allowable cost for future rate-making purposes. Therefore, all interest is expensed but is included as non-operating on the statements of revenues, expenses and changes in net position as incurred.

Use of Estimates

The preparation of financial statements in conformity with the accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets and deferred outflows of resources and liabilities and deferred inflows of resources and disclosure of contingent assets and liabilities 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.

Extraordinary and Special Items

Extraordinary items are transactions or events that are both unusual in nature and infrequent in occurrence. Special items are transactions or events that are within the control of the District Administration and that are either unusual in nature or infrequent in occurrence. The District had no extraordinary or special items for the years ended December 31, 2019 and 2018.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 3: Deposits and Investments

Deposits

Ohio law requires that deposits be placed in eligible banks or savings and loan associations located in Ohio. At December 31, 2019, the carrying amount of the District's deposits was \$65,321,477 and the bank balance was \$68,903,618. Of the bank balance, \$16,352,248 is sewer cash, of which, \$250,000 was covered by Federal depository insurance and \$16,102,248 was covered by collateral held by the OPCS (Ohio Pooled Collateral System). Of the bank balance, \$47,551,370 is stormwater cash and cash equivalents, and is deposited with Star Ohio. At December 31, 2018, the carrying amount of the District's deposits was \$58,403,103 and the bank balance was \$60,434,120. Of the bank balance, \$12,882,750 was sewer cash, of which, \$250,000 was covered by Federal depository insurance and \$12,632,750 was covered by collateral held by the OPCS (Ohio Pooled Collateral System). Of the bank balance, \$47,551,370 was stormwater cash and cash equivalents, and was deposited with Star Ohio. The District has no deposit policy for custodial risk beyond the requirements of State statute. Ohio law requires that deposits either be insured or be protected by:

Eligible securities pledged to the District and deposited with a qualified trustee by the financial institution as security for repayment whose market value at all times shall be at least 105 percent of the deposits being secured; or Participating in the Ohio Pooled Collateral System (OPCS), a collateral pool of eligible securities deposited with a qualified trustee and pledged to the Treasurer of State to secure the repayment of all public monies deposited in the financial institutions. OPCS requires the total market value of the securities pledged to be 102 percent of the deposits being secured or a rate set by the Treasurer of State. At December 31, 2019 and 2018, one of the District's two financial institutions is a member of OPCS.

Investments

The District's investment policies are currently governed by its Series 2019, 2017, 2016, 2014, 2013, and 2010 Wastewater Improvement Revenue Bond Resolution (the "Resolution") as permitted by State statute. The Resolution allows the District to purchase certain instruments, including obligations of the U.S. Treasury, its agencies and instrumentalities, interest-bearing demand or time deposits, repurchase agreements and, in certain situations, pre-refunded municipal obligations, general obligations of any state and other fixed income securities. Repurchase transactions are not to exceed one year and must be collateralized by obligations of the U.S. Government or its agencies which are held by a third-party custodian.

The investments included in the Revenue Bond Debt Service Deposit are governed by the provisions of a trust agreement which provides for interest and principal payments on the 2010, 2013, 2014, 2016, 2017 and 2019 Series Bonds.

At December 31, 2019, the District's investment balances and maturities were as follows:

			Maturities	s (in years)
Investment Type	Fair Value	% of Total	Less than 1	1 through 5
U.S. Treasury Notes	\$ 99,086,881	31%	\$ 85,971,440	\$ 13,115,441
State Treasury Asset Reserve	192,657,143	59%	192,657,143	-
Federal Home Loan Mortgage Corp.	5,033,667	2%	5,033,667	-
Federal Home Loan Bank	16,282,731	5%	8,112,655	8,170,076
Federal Farm Credit Bank	8,090,351	2%	-	8,090,351
Certificates of Deposit	4,154,493	1%	4,154,493	-
Dreyfus Cash Management	4,931	0%	4,931	
	\$ 325,310,197		\$ 295,934,329	\$ 29,375,868

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 3: Deposits and Investments (continued)

At December 31, 2018, the District's investment balances and maturities were as follows:

			Maturities	(in years)		
Investment Type	Fair Value	% of Total	Less than 1	1 through 5		
U.S. Treasury Bills	\$ 4,981,880	2%	\$ 4,981,880	\$ -		
U.S. Treasury Notes	58,979,249	20%	53,960,830	5,018,419		
State Treasury Asset Reserve	156,665,182	55%	156,665,182	-		
Federal National Mortgage Assoc.	35,739,290	12%	35,739,290	-		
Federal Home Loan Mortgage Corp.	4,978,067	2%	-	4,978,067		
Federal Home Loan Bank	24,966,688	9%	24,966,688	-		
Dreyfus Cash Management	3,928	0%	3,928			
	\$ 286,314,284		\$ 276,317,798	\$ 9,996,486		

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. It is the District's policy to hold instruments to maturity, limiting any investment to a maximum of five years. The targeted weighted average days to maturity for the overall District portfolio is not more than two years. In addition, Ohio law prescribes that all District investments mature within five years of purchase, unless the investment is matched to a specific obligation or debt of the District.

Credit Risk: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The District's investment policy authorizes investments in obligations of the U.S. Treasury, U.S. agencies and instrumentalities, interest-bearing demand or time deposits, State Treasury Asset Reserve of Ohio ("STAR Ohio"), money market mutual funds, repurchase agreements, and in certain situations, pre-funded municipal obligations, general obligations of any state and other fixed income securities. Repurchase transactions are not to exceed one year and must be collateralized by obligations of the U.S. Government or its agencies which are held by a third-party custodian. STAR Ohio is an investment pool created pursuant to Ohio statutes and is managed by the Treasurer of the State of Ohio. As of December 31, 2019, the District's investment in U.S. instrumentalities consisted of Federal Home Loan Mortgage Corporation, Federal Home Loan Bank and Federal Farm Credit Bank. As of December 31, 2018, the District's investment in U.S. instrumentalities consisted of Federal National Mortgage Association, Federal Home Loan Mortgage Corporation and Federal Home Loan Bank. For both years, these investments were all rated AA+ by Standard & Poor's and Aaa by Moody's Investors Service. Investments in U.S. Treasury Notes were rated AA+ by Standard & Poor's and Aaa by Moody's Investors Service. The Investments in STAR Ohio and Bank of New York were rated AAAm by Standard & Poor's and Aaa by Moody's Investors Service.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 3: Deposits and Investments (continued)

Custodial Credit Risk: Custodial credit risk is the risk that, in the event of the failure of a counterparty to a transaction, the District will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Consistent with the requirements of State Law, it is the policy of the District to require full collateralization of all investments other than obligations of U.S. Government, its agencies and instrumentalities. The District's investment in U.S. agencies with fair values totaling \$29,406,749 has maturities of \$13,146,322 in less than one year and \$16,260,427 within five years. U.S. agencies are held in the accounts of Huntington Bank and PNC National Bank (Trustees), at the Federal Reserve Bank of Cleveland. The District's securities associated with the principal and interest payment of bond obligations in the amount of \$12,759,244 are held in the account of Bank of New York under the Master Trust Agreement. Assets held by the Trustee as a custodial agent are considered legally separate from the other assets of Trustee.

Concentration of Credit Risk: Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer. The District's investment policy provides that investments be diversified to reduce the risk of loss from over concentration in a single issuer but does not identify specific limits on the amounts that may be so invested. More than five percent of the District's investments are in U.S. Treasury Notes, Star Ohio and Federal Home Loan Bank.

Note 4: Transactions with the City of Cleveland

As required by the court order establishing the District, the District and the City of Cleveland (the "City") entered into agreements which provide for the City, as the District's agent, to invoice, collect, and account for sewer and stormwater charges to most District users. The remaining District's users are invoiced directly by the District or by other billing agents.

Table below includes a summary of sewer and stormwater billing and collection transactions between the City and the District for 2019 and 2018:

	 2019	2018
Amounts due from District customers at beginning of year		
for invoices rendered by the City	\$ 119,511,285	\$ 111,416,459
Amounts billed to District customers by the City during the year	356,480,461	337,429,181
Cash collected from District customers by the City and remitted		
to the District during the year	(344,838,167)	(323,271,432)
Write off of inactive accounts	(5,610,241)	(7,555,613)
Cash collected directly by the District on invoices rendered by the		
City and other adjustment	(4,277,375)	1,492,690
Balance due from customers at end of year, included in		
service fees receivable before allowance for doubtful accounts	\$ 121,265,963	\$ 119,511,285

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 4: Transactions with the City of Cleveland (continued)

Service fees billed by the City are considered delinquent 23 days after the date of the bill. The fees are considered in arrears when they remain unpaid beyond 90 days from the date billed. The District may certify to the Cuyahoga County Fiscal Office any delinquent accounts billed by the City. Such certification will result in the delinquent amounts being placed on the real property tax duplicate for collection as taxes. Failure to pay the property tax and District fees will result in a lien on such property.

Fees paid to the City for billing and collection services in 2019 and 2018 were \$8,565,088 and \$8,160,961, respectively; of which, \$709,409 for 2019 and \$1,383,169 for 2018 are included in accounts payable on the District's statements of net position.

Note 5: Capital Assets and Depreciation

Capital asset activity for the year ended December 31, 2019 was as follows:

]	Balance December 31, 2018	Additions	R	etirements	Transfers	I	Balance December 31, 2019
Non-depreciable Capital Assets:	-							
Land	\$	28,859,749	\$ -	\$	-	\$ 6,847,107	\$	35,706,856
Construction in Progress		544,006,768	213,972,852		-	(91,557,546)		666,422,074
Total Non-depreciable Capital Assets		572,866,517	213,972,852			(84,710,439)	_	702,128,930
Depreciable Capital Assets:								
Interceptor Sewer Lines		1,587,441,872	-		(21,013)	27,533,207		1,614,954,066
Buildings, Structures and Improvements and Equip.		1,157,328,957	275,910		(221,236)	28,131,814		1,185,515,445
Sewage Treatment and Other Equipment		644,560,640	6,077,455		(23,747,900)	29,045,418		655,935,613
Right to Use-Intangible (*)		5,505,574	-		-	-		5,505,574
Total Depreciable Capital Assets		3,394,837,043	6,353,365		(23,990,149)	84,710,439		3,461,910,698
Total Historical Cost		3,967,703,560	 220,326,217		(23,990,149)	 -		4,164,039,628
Less Accumulated Depreciation For:								
Interceptor Sewer Lines		(305,122,230)	(23,352,344)		21,013	-		(328,453,561)
Buildings, Structures and Improvements and Equip.		(536,238,667)	(30,619,999)		213,718	-		(566,644,948)
Sewage Treatment and Other Equipment		(290,519,974)	(26,318,082)		22,951,784	-		(293,886,272)
Right to Use-Intangible (*)		(1,104,725)	(183,369)		-	-		(1,288,094)
Total Accumulated Depreciation		(1,132,985,596)	(80,473,794)		23,186,515	-		(1,190,272,875)
Capital Assets, Net	\$	2,834,717,964	\$ 139,852,423	\$	(803,634)	\$ 	\$	2,973,766,753
Depreciation Expense Charged to Operating Expenses			\$ 80,473,794					

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 5: Capital Assets and Depreciation (continued)

Capital asset activity for the year ended December 31, 2018 was as follows:

		Balance							Balance
	D	ecember 31,						Ι	December 31,
		2017	 Additions	R	etirements		Transfers		2018
Non-depreciable Capital Assets:									
Land	\$	25,112,079	\$ -	\$	(77,500)	\$	3,825,170	\$	28,859,749
Construction in Progress		744,323,178	 226,670,984		-		(426,987,394)		544,006,768
Total Non-depreciable Capital Assets		769,435,257	 226,670,984		(77,500)	_	(423,162,224)		572,866,517
Depreciable Capital Assets:									
Interceptor Sewer Lines		1,301,560,873	-		-		285,880,999		1,587,441,872
Buildings, Structures and Improvements and Equip.		1,054,276,986	300,394		(22,680)		102,774,257		1,157,328,957
Sewage Treatment and Other Equipment		607,418,695	5,987,721		(3,352,744)		34,506,968		644,560,640
Right to Use-Intangible (*)		5,505,574	 				-		5,505,574
Total Depreciable Capital Assets		2,968,762,128	6,288,115		(3,375,424)		423,162,224		3,394,837,043
Total Historical Cost		3,738,197,385	232,959,099		(3,452,924)	_		_	3,967,703,560
Less Accumulated Depreciation For:									
Interceptor Sewer Lines		(286,789,178)	(18,333,052)		-		-		(305,122,230)
Buildings, Structures and Improvements and Equip.		(507,159,137)	(29,096,728)		17,198		-		(536,238,667)
Sewage Treatment and Other Equipment		(269,390,086)	(24,119,991)		2,990,103		-		(290,519,974)
Right to Use-Intangible (*)		(921,356)	(183,369)				-		(1,104,725)
Total Accumulated Depreciation		(1,064,259,757)	(71,733,140)		3,007,301	_		_	(1,132,985,596)
Capital Assets, Net	\$	2,673,937,628	\$ 161,225,959	\$	(445,623)	\$	_	\$	2,834,717,964
Depreciation Expense Charged to Operating Expenses			\$ 71,733,140						

(*) During 2012, the District acquired an intangible asset due to an agreement with the City of Cleveland Department of Public Utilities Division of Cleveland Public Power. Per this agreement, the District has the right to use the power provided from the Nine Mile Creek substation, which was constructed by the District, but is owned by the City. The construction of the substation was completed in 2012 and capitalized; there were minor subsequent costs in the following years. The asset's original cost basis is \$5,505,574 as of December 31, 2019 and 2018. Below is a schedule of the amounts to be expensed in future years:

	Amortization of				
Year Ending December	Intai	ngible Asset			
2020	\$	183,369			
2021		183,369			
2022		183,369			
2023		183,369			
2024		183,369			
2025-2029		916,843			
2030-2034		916,843			
2035-2039		916,843			
2040-2042		550,106			
	\$	4,217,480			

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations

A summary of long-term debt outstanding at December 31, 2019 and 2018 follows:

	Interest Rate	2019	2018
Wastewater Improvement Revenue			
Bonds, Series 2010:			
Serial Bonds Maturing 2026 through 2032	5.44%	\$ 85,210,000	\$ 336,930,000
Wastewater Improvement Revenue			
Bonds, Series 2013:			
Serial Bonds Maturing 2020 through 2043	2.00%-5.00%	24,730,000	24,730,000
Wastewater Improvement Revenue			
Bonds, Series 2014A:			
Serial Bonds Maturing 2017 through 2049	1.75%-5.00%	329,585,000	332,585,000
Wastewater Improvement Revenue			
Refunding Bonds, Series 2014B:			
Serial Bonds Maturing 2018 through 2033	4.00%-5.00%	62,285,000	65,440,000
Wastewater Improvement Revenue			
Refunding Bonds, Series 2016:	2 000/	21 700 000	21 055 000
Serial Bonds Maturing 2017 through 2036	3.00%	21,790,000	21,955,000
Wastewater Improvement Revenue			
Refunding Bonds, Series 2017:			
Serial Bonds Maturing 2023 through 2043	3.00-5.00%	241,040,000	241,595,000
Wastewater Improvement Revenue			
Refunding Bonds, Series 2019:			
Serial Bonds Maturing 2033 through 2040	3.00-4.00%	245,005,000	-
Water Pollution Control Loans Payable			
through 2054	0.00%-5.20%	707,522,345	595,876,147
Total Debt		1,717,167,345	1,619,111,147
Less Current Maturities		(45,336,035)	(44,545,380)
Bond Premium (Discount), Net		63,686,193	48,512,807
Total Long-Term Debt		\$ 1,735,517,503	\$ 1,623,078,574

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Wastewater Improvement Revenue Bonds, Series 2010 "Build America Bonds"

On November 17, 2010, the District issued \$336,930,000 of Wastewater Improvement Revenue Bonds, Series 2010 (the "Series 2010 Bonds") as Federally Taxable - "Build America Bonds" for purposes consistent with the American Recovery and Reinvestment Act of 2009 (the "Recovery Act") and to receive a cash subsidy from the United States Treasury in connection therewith (the "Direct Payment"). Pursuant to the Recovery Act, the District is entitled to receive Direct Payments rebating a portion of the interest on the Build America Bonds from the United States Treasury equal to 35.0% of the interest payable on the Series 2010 Bonds. The Series 2010 Bonds were issued for the purpose of (i) providing funds for the acquisition, construction and improvement of wastewater facilities or water management facilities, constituting Water Resource Projects, including without limitation, the financing of 24 months of capitalized interest and (ii) paying the costs of issuance of the Series 2010 Bonds. These bonds are payable from the revenues of the District, after the payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities. The bonds are additionally secured by a pledge of and lien on the monies and investments in the Revenue Bond Debt Service Deposit.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2010 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2010 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service funds, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operation and maintenance charges have been paid.

Build America Bonds Subsidy

Under the Build America Bonds agreement, the District is to receive 35.0% of the Bond interest as the Build America Bonds Subsidy. The subsidy payment amounts received in 2019 and 2018 were \$4,801,356 and \$6,497,151, respectively, which is a reduction of \$966,663 and \$444,250 due to the recent sequester by Congress. The subsidy payment for 2019 has been reduced by 6.20% and as a result of refunding a portion of the 2010 "Build America Bonds" it has been reduced in the amount of \$966,663 and all future subsidy payments have been reduced by 5.90% based on 2019 reductions. Future payments may also be reduced by Congress on an annual basis. Below is a schedule of the amounts expected to be received in future years:

Year Ending December 31,	Subsidy Amount
2020	\$ 1,521,250
2021	1,521,250
2022	1,521,250
2023	1,521,250
2024	1,521,250
2025-2029	6,962,652
2030-2032	1,856,886
	\$ 16,425,788

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Wastewater Improvement Revenue Bonds, Series 2013

On March 26, 2013, the District issued \$249,535,000 of Wastewater Improvement Revenue Bonds, Series 2013. The Wastewater Improvement Revenue Bonds, Series 2013 Bonds (the "Series 2013 Bonds") were issued for the purpose of (i) providing funds for the acquisition, construction and improvement of Water Resource Projects and (ii) paying certain costs of issuance of the Series 2013 Bonds. These bonds are payable from the revenues of the District, after the payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2013 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2013 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service funds, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operation and maintenance charges have been paid.

Wastewater Improvement Revenue (2014A) and Refunding (2014B) Bonds, Series 2014

On December 18, 2014, the District issued \$419,030,000 of Wastewater Improvement Revenue and Refunding Bonds, Series 2014 Bonds (the "Series 2014 Bonds") were comprised of \$350,570,000 (2014A) for new bonds and \$68,460,000 (2014B) to refund a portion of the 2007 Wastewater Improvement Revenue Bonds previously issued on May 22, 2007. The Wastewater Improvement Revenue and Refunding Bonds, Series 2014 Bonds were issued for the purpose of (i) providing funds for the acquisition, construction and improvement of Water Resource Projects, (ii) paying certain costs of issuance of the Series 2014 Bonds and (iii) to refund a portion of 2007 Bonds. These bonds are payable from the revenues of the District, after the payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2014 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2014 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service funds, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operation and maintenance charges have been paid.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Wastewater Improvement Revenue Refunding Bonds, Series 2016

The District issued \$25,015,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2016 (the "2016 Series Bonds"), in connection with the advance refunding of its Wastewater Improvement Revenue Bonds, Series 2007 (the "2007 Series Bonds"). The 2016 Series Bonds are payable from the revenues of the District, after payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities. The bonds are additionally secured by a pledge of and lien on monies and investments comprising the Revenue Bond Debt Service Deposit.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2016 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2016 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service accounts, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operating and maintenance charges have been paid.

Wastewater Improvement Revenue Refunding Bonds, Series 2017

On September 20, 2017, the District issued \$241,595,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2017 (the "2017 Series Bonds"), in connection with the advance refunding of the 2013 Series Bonds. The 2017 Series Bonds are payable from the revenues of the District, after payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities. The bonds are additionally secured by a pledge of and lien on monies and investments comprising the Revenue Bond Debt Service Deposit.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2017 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2017 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service accounts, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operating and maintenance charges have been paid.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Wastewater Improvement Revenue Refunding Bonds, Series 2019

On September 10, 2019, the District issued \$245,005,000 of Wastewater Improvement Revenue Refunding Bonds, Series 2019 (the "2019 Series Bonds"), in connection with the advance refunding of the 2010 Series Bonds. The 2019 Series Bonds are payable from the revenues of the District, after payment of operating and maintenance costs. The bonds are secured by a pledge of and lien on such net revenues. Revenues include all revenues (with certain exceptions) derived by the District from its ownership and operation of the System, which comprises its wastewater collection and wastewater treatment and disposal facilities. The bonds are additionally secured by a pledge of and lien on monies and investments comprising the Revenue Bond Debt Service Deposit.

Upon the occurrence of an event of default, the Trustee may declare the principal of all bonds then outstanding (if not then due and payable) and the interest accrued hereon to be due and payable immediately, whereupon that portion of the principal of the Series 2019 Bonds thereby coming due and the interest thereon accrued to the date of payment shall, without further action, become and be immediately due and payable, anything in the Trust Agreement or in the Series 2019 Bonds to the contrary notwithstanding.

The bond indenture requires, among other provisions, that the District establish certain debt service accounts, maintain the system in good operating condition, and charge rates such that the necessary debt service payments can be made after operating and maintenance charges have been paid.

Water Pollution Control Loans

Title VI of the Clean Water Act, as amended, authorizes the Administrator of the U.S. Environmental Protection Agency to make Federal capitalization grants to states for deposit in state water pollution control revolving funds (SRFs). From these funds, states can provide loans and other types of financial assistance. In Ohio, this SRF program is known as the Water Pollution Control Loan Fund and is jointly administered by the Ohio EPA and the Ohio Water Development Authority. These loans are subordinate to the 2010, 2013, 2014, 2016, 2017 and 2019 Series Bonds and are payable from the revenues of the District, after payment of operating and maintenance costs and are secured by a pledge of and lien on such net revenues. Principal balances on loans increase as project costs are incurred. Interest accrues on principal amounts outstanding during the construction period and is combined with the principal balance upon completion of the project.

The repayment period for each loan commences no later than the first January or July following the expected completion dates of the project to which it relates utilizing an estimate of total eligible project costs as the preliminary loan amount. The District is required to submit final eligible project costs within one year of the project completion date at which time the final loan amount is determined, and semi-annual payment amounts are adjusted to reflect such costs. The District had several SRF loan awards related to numerous projects which were not completed as of December 31, 2019, and 2018. Loans related to completed construction projects are being repaid in semi-annual payments of principal and interest over a period of up to twenty-three years. SRF loans outstanding by completion or expected completion year of the related projects as of December 31, 2019 follow:

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Water Pollution Control Loans (continued)

		Current Amount	Additional Available
Completion or Expected Completion Year	Number	Including Accrued	Borrowings Including
of	of	Construction	Construction
Projects	Projects	Period Interest	Period Interest
1993 – 2018	40	\$ 387,997,828	\$ 1,115,765
2019 - 2023	17	 319,524,517	216,147,026
		\$ 707,522,345	\$ 217,262,791

Defeasance Transactions

In 2014, the District issued \$68,460,000 in Wastewater Improvement Revenue Refunding bonds (2014B) to refund a portion of the 2007 Wastewater Improvement Revenue Bonds previously issued on May 22, 2007 of \$72,940,000. The net proceeds were used to purchase direct obligations of the U.S. Government. Those securities were deposited in an irrevocable trust with an escrow agent. The securities and fixed earnings from the securities are sufficient to provide for all future debt service payments on the refunded portion of the series 2007 wastewater improvement bonds. As a result, that portion of the 2007 series bonds is considered defeased, and the District has removed the liability from its accounts. As the result of refunding, total debt service payments were reduced over the next 18 years by \$6,908,449. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt in the amount of \$4,966,923. As of December 31, 2019 and 2018, \$62,285,000 and \$65,440,000; respectively, are the portions of refunded debt which remain outstanding. The Series 2007 Bonds were not subject to redemption at the option of the District prior to their stated maturity.

In 2016, the District issued \$25,015,000 in Wastewater Improvement Revenue Refunding bonds, Series 2016 to advance refund and defease the Series 2007 Wastewater Improvement Refunding Bonds of \$23,700,000. The net proceeds were used to purchase direct obligations of the U.S. Government. Those securities were deposited in an irrevocable trust with an escrow agent. The securities and fixed earnings from the securities are sufficient to provide for all future debt service payments on the series 2007 wastewater improvement bonds. As a result, that portion of the 2007 wastewater improvement bonds are considered defeased, and the District has removed the liability from its accounts. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt in the amount of \$3,203,519. As of December 31, 2019 and 2018, \$21,790,000 and \$21,955,000; respectively, are the portions of refunded debt which remain outstanding. The Series 2016 Bonds are not subject to redemption at the option of the District prior to their stated maturity.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Defeasance Transactions (continued)

In 2017, the District issued \$241,595,000 in Wastewater Improvement Revenue Refunding bonds, Series 2017 to advance refund and defease the Series 2013 Wastewater Improvement Refunding Bonds of \$224,805,000. The net proceeds were used to purchase direct obligations of the U.S. Government. Those securities were deposited in an irrevocable trust with an escrow agent. The securities and fixed earnings from the securities are sufficient to provide for all future debt service payments on the series 2013 wastewater improvement bonds. As a result, that portion of the 2013 wastewater improvement bonds are considered defeased, and the District has removed the liability from its accounts. As the result of refunding, total debt service payments were reduced over the next 26 years by \$18,043,899. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt in the amount of \$16,984,749. The related amortization is being charged to interest expense on long-term debt through the year 2019 using the effective interest method. As of December 31, 2019 and 2018, \$241,040,000 and \$241,595,000; respectively are the portions of refunded debt remaining outstanding. The Series 2017 Bonds maturing before November 15, 2028 are not subject to optional redemption prior to maturity. The Series 2017 Bonds maturing on or after November 15, 2028 shall be subject to redemption prior to maturity at the option of the District in whole or in part, at any time on or after May 15, 2028 from any moneys available therefor, in the maturities designated by the District for redemption, at the redemption price equal to 100% of the principal amount redeemed, plus accrued interest to the date fixed for the redemption.

In 2019, the District issued \$245,005,000 in Wastewater Improvement Revenue Refunding bonds, Series 2019 to advance refund and defease part of the Series 2010 Wastewater Improvement Refunding Bonds of \$251,720,000. The net proceeds were used to purchase direct obligations of the U.S. Government. Those securities were deposited in an irrevocable trust with an escrow agent. The securities and fixed earnings from the securities are sufficient to provide for all future debt service payments on the series 2010 wastewater improvement bonds. As a result, that portion of the 2010 wastewater improvement bonds are considered defeased, and the District has removed the liability from its accounts. As the result of refunding, total debt service payments were reduced over the next 21 years by \$37,015,310. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt in the amount of \$11,144,449. The related amortization is being charged to interest expense on long-term debt through the year 2019 using the effective interest method. As of December 31, 2019, \$245,005,000 of the portion of refunded debt remained outstanding. The Series 2019 Bonds shall be subject to redemption prior to maturity at the option of the District in whole or in part, at any time on or after November 15, 2029 from any moneys available therefore, in the maturities designated by the District for redemption, at the redemption price equal to 100% of the principal amount redeemed, plus accrued interest to the date fixed for the redemption.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Future Debt Service Requirements

The District anticipates significant additional long-term debt borrowings for ongoing and future construction projects.

The total future debt service requirements for all long-term debt not defeased or refunded as of December 31, 2019 follows:

		Wastewater Imp	provement		Wastewater Improvement				
		Revenue Bonds S	Series 2010		Revenue Bonds Series 2013				
	Principal		Interest		Principal		Interest		
2020	\$	- \$	3,112,470	\$	4,515,000	\$	951,850		
2021		-	3,112,470		3,850,000		801,250		
2022		-	3,112,470		1,915,000		666,750		
2023		-	3,112,470		-		578,000		
2024		-	3,112,470		-		578,000		
2025-2029		35,925,000	14,245,547		-		2,890,000		
2030-2034		49,285,000	3,799,177		14,450,000		1,836,000		
Total	\$	85,210,000 \$	33,607,074	\$	24,730,000	\$	8,301,850		
		Wastewater Imp	provement		Wastewater Improvement				
		Revenue Refund	ding Bonds		Revenue Refunding Bonds				
		Series 20	14A	_	Serie	s 20	14B		

	 Deffes 2	20172	1	_	Defies 2014D			
	Principal		Interest		Principal		Interest	
2020	\$ - \$	<u> </u>	15,150,775	\$	3,225,000	\$	2,986,000	
2021	-		15,150,775		3,385,000		2,824,750	
2022	-		15,150,775		3,550,000		2,655,500	
2023	_		15,150,775		3,705,000		2,508,500	
2024	_		15,150,775		3,885,000		2,323,250	
2025-2029	7,390,000		75,222,125		22,335,000		8,714,250	
2030-2034	15,565,000		72,519,625		22,200,000		2,639,400	
2035-2039	25,860,000		67,849,250		-		-	
2040-2044	73,805,000		59,257,000		-		-	
2045-2049	 206,965,000		28,023,800		-	_	-	
Total	\$ 329,585,000 \$	3	378,625,675	\$	62,285,000	\$	24,651,650	

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Wastewater Improvement

Wastewater Improvement

Note 6: Long-Term Obligations (continued)

Future Debt Service Requirements (continued)

		Revenue Re Serie	fundi es 201	U		Revenue Refunding Bonds Series 2017				
		Principal		Interest		Principal		Interest		
2020	\$	170,000	\$	653,700	\$	585,000	\$	9,618,463		
2021		175,000		648,600		615,000		9,589,212		
2022		180,000		643,350		645,000		9,558,463		
2023		190,000		637,950		1,185,000		9,526,212		
2024		195,000		632,250		2,280,000		9,466,963		
2025-2029		1,055,000		3,070,500		27,615,000		44,287,062		
2030-2034		7,065,000		2,902,350		28,410,000		37,367,563		
2035-2039		12,760,000		577,050		76,250,000		28,948,012		
2040-2044		-		-		103,455,000		10,477,188		
Total	\$	21 790 000	\$	9 765 750	\$	241 040 000	\$	168 839 138		

Wastewater Improvement Water
Revenue Refunding Bonds Pollution
Series 2019 Control Loans

	Principal	Interest	Principal	Interest
2020	\$ -	\$ 7,958,700	\$ 36,841,035	\$ 11,593,203
2021	-	7,958,700	40,594,974	12,432,477
2022	-	7,958,700	43,896,389	13,240,282
2023	-	7,958,700	44,273,184	12,102,540
2024	-	7,958,700	40,018,111	10,988,861
2025-2029	-	39,793,500	169,540,400	47,446,802
2030-2034	47,060,000	39,118,350	138,886,385	28,742,490
2035-2039	159,600,000	22,708,700	87,503,382	15,224,548
2040-2044	38,345,000	1,150,350	41,824,462	8,829,772
2045-2049	-	-	41,358,198	4,746,169
2050-2054	 _	 _	 22,785,825	1,000,317
Total	\$ 245,005,000	\$ 142,564,400	\$ 707,522,345	\$ 166,347,461

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Future Debt Service Requirements (continued)

Future Debt Service Requirements

	Total							
	Principal	Interest						
2020	\$ 45,336,035	\$ 52,025,161						
2021	48,619,974	52,518,234						
2022	50,186,389	52,986,290						
2023	49,353,184	51,575,147						
2024	46,378,111	50,211,269						
2025-2029	263,860,400	235,669,786						
2030-2034	322,921,385	188,924,955						
2035-2039	361,973,382	135,307,560						
2040-2044	257,429,462	79,714,310						
2045-2049	248,323,198	32,769,969						
2050-2054	22,785,825	1,000,317						
Total	\$ 1,717,167,345	\$ 932,702,998						

Bond premium and discount activity for 2019 and 2018 are as follows:

<u>December 31, 2019</u>		Beginning							Ending		
		Balance		Amortized		Refunded		Issued	Balance		
Bond Premium, Series 2013	\$	1,551,061	\$	(278,048)	\$	-	\$	-	\$	1,273,013	
Bond Premium, Series 2014A		23,225,769		(1,676,568)		-		-		21,549,201	
Bond Premium, Series 2014B		6,267,497		(1,003,908)		-		-		5,263,589	
Bond Discount, Series 2016		(20,287)		1,906		-	-			(18,381)	
Bond Premium, Series 2017		17,488,767		(1,705,242)		-		-		15,783,525	
Bond Premium, Series 2019				(626,055)		-		20,461,301		19,835,246	
Total	\$	48,512,807	\$	(5,287,915)	\$	-	\$	20,461,301	\$	63,686,193	
December 31, 2018		Beginning								Ending	
<u> </u>		Balance		Amortized		Refunded		Issued		Balance	
Bond Premium, Series 2013	\$	1,858,619	\$	(307,558)	\$	_	\$	-	\$	1,551,061	
Bond Premium, Series 2014A		25,103,032		(1,877,263)		-		-		23,225,769	
Bond Premium, Series 2014B		7,443,218		(1,175,721)		-		-		6,267,497	
Bond Discount, Series 2016		(22,413)		2,126		-		-		(20,287)	
Bond Premium, Series 2017		19,573,715		(2,084,948)		-		-		17,488,767	
Total	\$	53,956,171	\$	(5,443,364)	\$	-	\$	-	\$	48,512,807	

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Long-term debt activity for the year is as follows:

Wastewater Improvement Revenue Bonds, Series 2010 \$ 336,930,000 \$ - \$ (251,720,000) \$ 85,210,000 \$ - Wastewater Improvement Revenue Bonds, 24,730,000 4,515,000 Wastewater Improvement Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	<u>December 31, 2019</u>	Beginning		A 11ii		D - 14:			Ending	Due		
Revenue Bonds, Series 2010 \$ 336,930,000 \$ - \$ (251,720,000) \$ 85,210,000 \$ - Wastewater Improvement Revenue Bonds, - - - 24,730,000 \$ 4,515,000 Wastewater Improvement Revenue Bonds, - - (3,000,000) 329,585,000 - Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	•••		Balance		Additions	_	Reductions		Balance		in 2020	
Series 2010 \$ 336,930,000 \$ - \$ (251,720,000) \$ 85,210,000 \$ - Wastewater Improvement Revenue Bonds, - - - 24,730,000 \$ 4,515,000 Wastewater Improvement Revenue Bonds, - - - 24,730,000 4,515,000 Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	=											
Wastewater Improvement Revenue Bonds, Series 2013 24,730,000 - - - 24,730,000 4,515,000 Wastewater Improvement Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	*		22602000	•		•	(2.54. = 2.2. 0.0.)	•	0.5.04.0.000	•		
Revenue Bonds, Series 2013 24,730,000 - - - 24,730,000 4,515,000 Wastewater Improvement Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -		\$	336,930,000	\$	-	\$	(251,720,000)	\$	85,210,000	\$	-	
Series 2013 24,730,000 - - 24,730,000 4,515,000 Wastewater Improvement Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	<u>*</u>											
Wastewater Improvement Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	· ·											
Revenue Bonds, Series 2014A 332,585,000 - (3,000,000) 329,585,000 -			24,730,000		-		-		24,730,000		4,515,000	
Series 2014A 332,585,000 - (3,000,000) 329,585,000 -	•											
	· ·											
Wastewater Improvement	Series 2014A		332,585,000		-		(3,000,000)		329,585,000		-	
wastewater improvement	Wastewater Improvement											
Revenue Refunding Bonds,	Revenue Refunding Bonds,											
Series 2014B 65,440,000 - (3,155,000) 62,285,000 3,225,000	Series 2014B		65,440,000		-		(3,155,000)		62,285,000		3,225,000	
Wastewater Improvement	Wastewater Improvement											
Revenue Refunding Bonds,	Revenue Refunding Bonds,											
Series 2016 21,955,000 - (165,000) 21,790,000 170,000	Series 2016		21,955,000		-		(165,000)		21,790,000		170,000	
Wastewater Improvement	Wastewater Improvement											
Revenue Refunding Bonds,	Revenue Refunding Bonds,											
Series 2017 241,595,000 - (555,000) 241,040,000 585,000	Series 2017		241,595,000		-		(555,000)		241,040,000		585,000	
Wastewater Improvement	Wastewater Improvement											
Revenue Refunding Bonds,	Revenue Refunding Bonds,											
Series 2019 - 245,005,000 - 245,005,000 -	Series 2019		-		245,005,000		-		245,005,000		_	
Water Pollution Control Loans 595,876,147 150,046,133 (38,399,935) 707,522,345 36,841,035	Water Pollution Control Loans		595.876.147		150.046.133		(38.399.935)		707.522.345		36.841.035	
(,,,,,,,,,			,,		, ,		(, ,)		, . , . ,		,- ,	
Net Pension Liability 56,918,326 40,160,260 - 97,078,586 -	Net Pension Liability		56 918 326		40 160 260		_		97 078 586		_	
			,- 10,0-0		,,				.,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Net OPEB Liability 42,429,314 7,527,009 - 49,956,323 -	Net OPEB Liability		42,429,314		7,527,009		-		49,956,323		-	
Total \$ 1,718,458,787 \$ 442,738,402 \$ (296,994,935) \$ 1,864,202,254 \$ 45,336,035	Total	\$	1,718,458,787	\$	442,738,402	\$	(296,994,935)	\$	1,864,202,254	\$	45,336,035	

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 6: Long-Term Obligations (continued)

Long-term debt activity for the year is as follows:

<u>December 31, 2018</u>	Beginning			Ending	Due
	 Balance	 Additions	 Reductions	 Balance	 in 2019
Wastewater Improvement					
Revenue Bonds,					
Series 2010	\$ 336,930,000	\$ -	\$ -	\$ 336,930,000	\$ -
Wastewater Improvement					
Revenue Bonds,					
Series 2013	24,730,000	-	-	24,730,000	-
Wastewater Improvement					
Revenue Bonds,					
Series 2014A	336,570,000	-	(3,985,000)	332,585,000	3,000,000
Wastewater Improvement					
Revenue Refunding Bonds,					
Series 2014B	68,460,000	-	(3,020,000)	65,440,000	3,155,000
Wastewater Improvement					
Revenue Refunding Bonds,					
Series 2016	22,115,000	-	(160,000)	21,955,000	165,000
Wastewater Improvement					
Revenue Refunding Bonds,					
Series 2017	241,595,000	_	-	241,595,000	555,000
Water Pollution Control Loans	515,685,142	115,302,748	(35,111,743)	595,876,147	37,670,380
	,,	- 7 7-	(, , , -,	,,	, ,
Net Pension Liability	77,659,205	_	(20,740,879)	56,918,326	_
1.00 I onsion Lationary	77,057,205		(20,710,077)	20,210,220	
Net OPEB Liability	36,826,620	5,602,694	-	42,429,314	-
Total	\$ 1,660,570,967	\$ 120,905,442	\$ (63,017,622)	\$ 1,718,458,787	\$ 44,545,380

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans

Net Pension/Other Postemployment Benefits (OPEB) Liability (Asset)

The net pension/OPEB liability (asset) reported on the Statements of Net Position represents a liability (asset) to employees for pensions/OPEB. Pensions/OPEB are a component of exchange transactions—between an employer and its employees—of salaries and benefits for employee services. Pensions/OPEB are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period. The obligation to sacrifice resources for pensions/OPEB is a present obligation because it was created as a result of employment exchanges that already have occurred.

The net pension/OPEB liabilities (assets) represents the District's proportionate share of each pension/OPEB plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of each pension/OPEB plan's fiduciary net position. The net pension/OPEB liability calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments and others. While these estimates use the best information available, unknowable future events require adjusting this estimate annually.

Ohio Revised Code limits the District's obligation for this liability to annually required payments. The District cannot control benefit terms or the manner in which pensions/OPEB are financed; however, the District does receive the benefit of employees' services in exchange for compensation including pension and OPEB.

GASB 68 and 75 assumes the liability is solely the obligation of the employer, because (1) they benefit from employee services; and (2) State statute requires all funding to come from these employers. All contributions to date have come solely from these employers (which also includes costs paid in the form of withholdings from employees). The retirement systems may allocate a portion of the employer contributions to provide for OPEB benefits including primarily health care. In most cases, health care plan enrollees pay a portion of the health care costs in the form of a monthly premium.

State statute requires the pension plans to amortize unfunded pension/OPEB liabilities within 30 years. If the pension/OPEB amortization period exceeds 30 years, each retirement system's board must propose corrective action to the State legislature. Any resulting legislative change to benefits or funding could significantly affect the net pension/OPEB liability (asset). Resulting adjustments to the net pension/OPEB liability (asset) would be effective when the changes are legally enforceable. The Ohio Revised Code permits, but does not require the retirement systems to provide healthcare to eligible benefit recipients.

The proportionate share of each plan's unfunded benefits is presented as a long-term net pension/OPEB liability (asset) on the accrual basis of accounting. Any liability for the contractually-required contribution outstanding at the end of the year is included as an accrued liability on the accrual basis of accounting. The remainder of this note includes the required pension disclosures. See Note 8 for the required OPEB disclosures.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS)

Plan Description - District employees participate in the Ohio Public Employees Retirement System (OPERS). OPERS administers three separate pension plans. The traditional pension plan is a cost-sharing, multiple-employer defined benefit pension plan. The member-directed plan is a defined contribution plan and the combined plan is a cost-sharing, multiple-employer defined benefit pension plan with defined contribution features. Although District employees may elect the member-directed plan, majority of employee members are in OPERS' traditional and combined plans; therefore, the following disclosure focuses on the traditional and combined pension plans.

OPERS provides retirement, disability, survivor and death benefits, and annual cost of living adjustments to members of the traditional plan. Authority to establish and amend benefits is provided by Chapter 145 of the Ohio Revised Code. OPERS issues a stand-alone financial report that includes financial statements, required supplementary information and detailed information about OPERS' fiduciary net position that may be obtained by visiting https://www.opers.org/financial/reports.shtml, by writing to the Ohio Public Employees Retirement System, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 800-222-7377.

Senate Bill (SB) 343 was enacted into law with an effective date of January 7, 2013. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. Final average salary (FAS) represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earning over a members career. Members who retire before meeting the age and years of service credit requirement for unreduced benefit receive a percentage reduction in the benefit amount.

The traditional pension plan is a defined benefit plan in which a member's retirement benefits are calculated on a formula that considers years of service and final average salary (FAS). Pension benefits are funded by both member and employer contributions and investment earnings on those contributions.

The following table provides age and service requirements for retirement and the retirement formula applied to final average salary (FAS) for the three-member groups under the traditional plan (see OPERS CAFR referenced above for additional information):

Group A

Eligible to retire prior to January 7, 2013 or five years after January 7, 2013

State and Local

Age and Service Requirements:

Age 60 with 60 months of service credit or Age 55 with 25 years of service credit

Formula:

2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30

Group B

20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013

State and Local

Age and Service Requirements:

Age 60 with 60 months of service credit or Age 55 with 25 years of service credit

Formula:

2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30

Group C

Members not in other Groups and members hired on or after January 7, 2013

State and Local

Age and Service Requirements:

Age 57 with 25 years of service credit or Age 62 with 5 years of service credit

Formula:

2.2% of FAS multiplied by years of service for the first 35 years and 2.5% for service years in excess of 35

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS) (continued)

Once a benefit recipient retiring under the traditional pension plan has received benefits for 12 months, current law provides for an annual cost-of-living adjustment (COLA). This COLA is calculated on the member's base retirement benefit at the date of retirement and is not compounded. Members retiring under the combined plan receive a COLA on the defined benefit portion of their retirement benefit. For those who retired prior to January 7, 2013, current law provides for a 3% COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, current law provides that the adjustment will be based on the average percentage increase in the Consumer Price Index, capped at 3%.

A death benefit of \$500-\$2,500, determined by the number of years of service credit of the retiree, is paid to the beneficiary of a deceased retiree or disability benefit recipient under the traditional pension plan and combined plan.

The OPERS Board of Trustees approved a proposal at its October 2019 meeting to create a new tier of membership in the OPERS traditional pension plan. OPERS currently splits its non-retired membership into Group A, B or C depending on age and service criteria. Retirement Group D would consist of OPERS-contributing members hired in 2022 and beyond. Group D will have its own eligibility standards, benefit structure and unique member features designed to meet the changing needs of Ohio public workers. It also will help OPERS address expected investment market volatility and adjust to the lack of available funding for health care.

The combined plan is a defined benefit plan with elements of a defined contribution plan. Members earn a formula benefit similar to, but at a factor less than the traditional plan benefit. This defined benefit is funded by employer contributions and associated investment earnings. Member contributions are deposited into a defined contribution account in which the member self-directs the investment. Upon retirement, the member may choose a defined contribution distribution that is equal to the member's contributions to the plan and investment earnings (or losses). Members may also elect to use their defined contribution account balances to purchase a defined benefit annuity administered by OPERS.

Benefits in the combined plan consist of both an age-and-service formula benefit (defined benefit) and a defined contribution element. The defined benefit element is calculated on the basis of age, FAS, and years of service. Eligibility regarding age and years of service in the combined plan is the same as the traditional plan.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS) (continued)

The subsequent table provides age and service requirements for retirement and the retirement formula applied to the FAS for the three member groups under the combined plan (see OPERS CAFR referenced above for additional information):

Group A

Eligible to retire prior to January 7, 2013 or five years after January 7, 2013

State and Local Age and Service Requirements:

Age 60 with 5 years of service credit or Age 55 with 25 years of service credit

Formula:

1.0% of FAS multiplied by years of service for the first 30 years and 1.25% for service years in excess of 30

Group B

20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013

State and Local Age and Service Requirements:

Age 60 with 5 years of service credit or Age 55 with 25 years of service credit

Formula:

1.0% of FAS multiplied by years of service for the first 30 years and 1.25% for service years in excess of 30

Group C

Members not in other Groups and members hired on or after January 7, 2013

State and Local Age and Service Requirements:

Age 57 with 25 years of service credit or Age 62 with 5 years of service credit

Formula:

1.0% of FAS multiplied by years of service for the first 35 years and 1.25% for service years in excess of 35

Defined contribution plan benefits are established in the plan documents, which may be amended by the OPERS Board. Both member-directed plan and combined plan members who have met the eligibility requirements may apply for retirement benefits. The amount available for defined contribution benefits in the combined plan consists of the member's contributions plus or minus the investment gains or losses resulting from the member's investment selections. Combined plan members wishing to receive benefits must meet the requirements for both the defined benefit and defined contribution plans.

Member-directed participants must have attained the age of 55, have money on deposit in the defined contribution plan and have terminated public service to apply for retirement benefits. The amount available for defined contribution benefits in the member-directed plan consists of the members' contributions, vested employer contributions and investment gains or losses resulting from the members' investment selections. Employer contributions and associated investment earnings vest over a five-year period, at a rate of 20% each year.

At retirement, members may select one of several distribution options for payment of the vested balance in their individual OPERS accounts. Options include the annuitization of their benefit (which includes joint and survivor options), partial lump-sum payments (subject to limitations), a rollover of the vested account balance to another financial institution, receipt of entire account balance, net of taxes withheld, or a combination of these.

Funding Policy – The Ohio Revised Code provides statutory District for member and employer contributions and currently limits the employer contribution to a rate not to exceed 14% of covered payroll for state and local employer units. Member contribution rates, as set forth in the Ohio Revised Code, are not to exceed 10% of covered payroll for members in the state and local classifications.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS) (continued)

The portion of employer contributions used to fund pension benefits is net of postemployment health care benefits. The portion of the employer's contribution allocated to health care was 0% for 2019 and 2018 for the traditional and combined plans. The portion of the employer's contribution allocated to health care was 4% for the member-directed plan for 2019. Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The District's contractually required contribution for the traditional plan, net of postemployment health care benefits, for 2019 and 2018 was \$6,792,330 and \$6,728,485, respectively. The contractually required contribution for the combined plan, net of postemployment health care benefits, for 2019 and 2018 were \$352,040 and \$382,655, respectively. Of these amounts, \$7,409 and \$729,039 were reported as intergovernmental payables for 2019 and 2018, respectively.

<u>Actuarial Assumptions – OPERS</u>

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The active member population which consists of members in the traditional and combined plans is assumed to remain constant. For purposes of financing the unfunded actuarial accrued liabilities, total payroll is assumed to grow at the wage inflation rate indicated below.

The total pension liability/asset for the measurement periods December 31, 2019 and 2018 were determined using the following actuarial assumptions that follow and as applied to all periods included in the measurement:

Key Methods and Assumptions Used in Valuation of Total Pension Liability - 2018

	OPERS Traditional Plan	OPERS Combined Plan
Actuarial Information		
Valuation Date	December 31, 2018	December 31, 2018
Experience Study	5-year period ended	5-year period ended
	December 31, 2015	December 31, 2015
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Actuarial Assumptions:		
Investment Rate of Return	7.20%	7.20%
Wage Inflation	3.25%	3.25%
Projected Salary Increase	3.25-10.75%	3.25-8.25%
COLA:	(includes 3.25% wage inflation)	(includes 3.25% wage inflation)
Pre-Jan 7, 2013 Retirees	3.00% Simple	3.00% Simple
Post-Jan 7, 2013 Retirees	3.00% Simple through 2018	3.00% Simple through 2018
	then 2.15% Simple	then 2.15% Simple

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Actuarial Assumptions – OPERS (continued)

Key Methods and Assumptions Used in Valuation of Total Pension Liability - 2017

	OPERS Traditional Plan	OPERS Combined Plan
Actuarial Information		
Valuation Date	December 31, 2017	December 31, 2017
Experience Study	5-year period ended	5-year period ended
	December 31, 2015	December 31, 2015
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Actuarial Assumptions:		
Investment Rate of Return	7.50%	7.50%
Wage Inflation	3.25%	3.25%
Projected Salary Increase	3.25-10.75%	3.25-8.25%
COLA:	(includes 3.25% wage inflation)	(includes 3.25% wage inflation)
Pre-Jan 7, 2013 Retirees	3.00% Simple	3.00% Simple
Post-Jan 7, 2013 Retirees	3.00% Simple through 2018	3.00% Simple through 2018
	then 2.15% Simple	then 2.15% Simple

OPERS conducts an experience study every five years in accordance with Ohio Revised Code Section 145.22. The study for the five-year period ended December 31, 2015 and methods and assumptions were approved and adopted by the OPERS Board of Trustees.

Mortality rates were based on the RP-2014 Health Annuitant Mortality table. For males, Healthy Annuitant Mortality tables were used, adjusted for mortality improvement back to the observation period base of 2006 and then established the base year as 2015. For females, Healthy Annuitant Mortality tables were used, adjusted for mortality improvements back to the observation period base year of 2006 and then established the base year as 2010.

The mortality rates used in evaluating disability allowances were based on the RP-2014 Disabled Mortality tables, adjusted for mortality improvement back to the observation base year of 2006 and then established the base year as 2015 for males and 2010 for females. Mortality rates for a particular calendar year for both healthy and disabled retiree mortality tables were determined by applying the MP-2015 Mortality Improvement Scale to the above described tables.

The long-term rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

During 2018, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets of the traditional plan, the defined benefit component of the combined plan and the annuitized accounts of the member-directed plan. The money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for changing amounts actually invested for the Defined Benefit portfolio was a loss of 2.94% for 2018.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

Actuarial Assumptions – OPERS (continued)

During 2017, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets of the traditional plan, the defined benefit component of the combined plan and the annuitized accounts of the member-directed plan. The money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for changing amounts actually invested for the Defined Benefit portfolio was 16.82% for 2017.

The allocation of investment assets with the Defined Benefit portfolio is approved by the Board as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The table below displays the Board-approved asset allocation policy for 2018 and the long-term expected real rates of return:

		2018 Weighted Average
	2018	Long-Term Expected
	Target	Real Rate of Return
Asset Class	Allocation	(Arithmetic)
Fixed income	23.0%	2.79%
Domestic equities	19.0%	6.21%
Real estate	10.0%	4.90%
Private equity	10.0%	10.81%
International equities	20.0%	7.83%
Other investments	<u>18.0%</u>	<u>5.50%</u>
Total	<u>100.0%</u>	<u>5.95%</u>

The table below displays the Board-approved asset allocation policy for 2017 and the long-term expected real rates of return:

	T .	2017 Weighted Average Long-Term Expected
Asset Class	Target Allocation	Real Rate of Return (Arithmetic)
Fixed income	23.0%	2.20%
Domestic equities	19.0%	6.37%
Real estate	10.0%	5.26%
Private equity	10.0%	8.97%
International equities	20.0%	7.88%
Other investments	<u>18.0%</u>	<u>5.26%</u>
Total	<u>100.0%</u>	<u>5.66%</u>

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

<u>Actuarial Assumptions – OPERS (continued)</u>

Discount Rate The discount rate used to measure the total pension liability (asset) for measurement years 2018 and 2017 was 7.2% and 7.5%, respectively. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the statutorily required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefits payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability (asset).

Sensitivity of the District's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate. The following table presents the District's proportionate share of the net pension liability (asset) calculated using the current period discount rate assumption of 7.2%, as well as what the District's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is one-percentage-point lower (6.2%) or one-percentage-point higher (8.2%) than the current rate:

District's proportionate share of net pension (asset) at December 31, 2019:

	1% Decrease (6.2%)	I	Oiscount Rate (7.2%)	1% Increase (8.2%)
District's proportionate share of the net pension liability – traditional	\$ 143,413,302	\$	97,078,586	\$ 58,574,019
District's proportionate share of the net pension asset – combined	\$ (234,808)	\$	(709,645)	\$ (1,053,461)

District's proportionate share of net pension (asset) at December 31, 2018 using the discount rate assumption for 2017 of 7.5%:

	1% Decrease (6.5%)	Ι	Discount Rate (7.5%)	1% Increase (8.5%)
District's proportionate share of the net pension liability – traditional	\$ 101,072,446	\$	56,918,326	\$ 20,107,096
District's proportionate share of the net pension asset – combined	\$ (506,598)	\$	(931,953)	\$ (1,225,420)

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

<u>Pension Liabilities (Assets), Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions</u>

The net pension liability (asset) for OPERS as of December 31, 2019 and 2018, was measured as of December 31, 2018 and 2017, respectively. The total pension liability (asset) used to calculate the net pension liability (asset) was determined by an actuarial valuation as of that date. The District's proportion of the net pension liability (asset) was based on the District's share of contributions to the pension plan relative to the contributions of all participating entities. Subsequent payments made during the current fiscal year are accounted for as deferred outflows. The following table reflects the proportionate share of pension expense for the current and prior year. The related deferred outflows and deferred inflows of resources associated with the pension liability (asset) are presented below.

2019 net pension assets and liabilities:

	OPERS		OPERS	
	Traditional	_	Combined	 Total
Proportion of the net pension				
liability/asset prior measurement date	0.362813%		0.684592%	
Proportion of the net pension				
liability/asset current measurement date	0.354457%	_	0.634615%	
Change in Proportionate Share	(0.008356%)		(0.049977%)	
Proportionate share of the net pension				
assets	\$ -	\$	709,645	\$ 709,645
Proportionate share of the net pension				
liability	\$ 97,078,586	\$	-	\$ 97,078,586
Pension expense	\$ 22,402,410	\$	194,289	\$ 22,596,699

2018 net pension assets and liabilities:

		OPERS Traditional		OPERS Combined	 Total
Proportion of the net pension					
liability/asset prior measurement date		0.341986%		0.583779%	
Proportion of the net pension					
liability/asset current measurement date	_	0.362813%	_	0.684592%	
Change in Proportionate Share		0.020827%		0.100813%	
Proportionate share of the net pension					
assets	\$	-	\$	931,953	\$ 931,953
Proportionate share of the net pension					
liability	\$	56,918,326	\$	-	\$ 56,918,326
Pension expense	\$	13,617,583	\$	143,098	\$ 13,760,681

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

<u>Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)</u>

At December 31, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

		OPERS		OPERS		Total
Deferred outflow of resources	•	Traditional		Combined	-	Total
District contributions subsequent to the measurement date Differences between projected and actual earnings on pension plan	\$	6,792,330	\$	352,040	\$	7,144,370
investments		13,176,281		152,868		13,329,149
Differences in employer contributions and change in proportionate share Difference between expected and		1,251,363		38,560		1,289,923
actual experience		4,477		-		4,477
Change in assumptions	Φ.	8,450,929	Φ	<u>158,494</u>	Φ -	8,609,423
Total deferred outflow of resources	\$	29,675,380 OPERS	\$	701,962 OPERS	\$ ₌	30,377,342
		Traditional		Combined	_	Total
Deferred inflow of resources Differences in employer contributions and change in proportionate share	\$	949,178	\$	48,975	\$	998,153
Difference between expected and actual experience Total deferred inflow of resources	•	1,274,698 2,223,876	\$	289,835 338,810	<u> </u>	1,564,533
Total deferred fifflow of resources	\$	4,443,870	Ф	338,810	a =	2,562,686

The \$7,144,370 reported as deferred outflows of resources related to pension resulting from the District's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 7: Pension Plans (continued)

<u>Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)</u>

		OPERS		OPERS		
	_	Traditional	_(Combined	_	Total
Fiscal Year Ending December 31:						
2020	\$	9,506,893	\$	21,334	\$	9,528,227
2021		3,801,974		(9,204)		3,792,770
2022		1,222,368		(5,980)		1,216,388
2023		6,127,939		41,879		6,169,818
2024		-		(20,960)		(20,960)
2025-2028	_			(15,957)	_	(15,957)
	\$ _	20,659,174	\$	11,112	\$ _	20,670,286

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Deferred outflow of resources	-	OPERS Traditional	_	OPERS Combined	_	Total
District contributions subsequent to the measurement date Differences in employer contributions	\$	6,728,485	\$	382,655	\$	7,111,140
and change in proportionate share Difference between expected and		2,654,920		-		2,654,920
actual experience		58,128		-		58,128
Change in assumptions	_	6,802,121	_	81,441		6,883,562
Total deferred outflow of resources	\$	16,243,654	\$ _	464,096	\$ _	16,707,750
		OPERS Traditional		OPERS Combined		Total
Deferred inflow of resources Differences in employer contributions	-	Traditional	_	Combined	-	Total
Differences in employer contributions and change in proportionate share	\$		\$		\$	Total 57,366
Differences in employer contributions and change in proportionate share Differences between projected and actual earnings on pension plan	\$	Traditional 1,035	\$	Combined 56,331	\$	57,366
Differences in employer contributions and change in proportionate share Differences between projected and actual earnings on pension plan investments	\$	Traditional	\$	Combined	\$	
Differences in employer contributions and change in proportionate share Differences between projected and actual earnings on pension plan	\$	Traditional 1,035	\$	Combined 56,331	\$	57,366

\$7,111,140 reported as deferred outflows of resources related to pension resulting from District contributions subsequent to the measurement date was recognized as a reduction of the net pension liability in the year ending December 31, 2019.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions

Plan Description - Ohio Public Employees Retirement System

Plan Description – OPERS is a cost-sharing, multiple-employer public employee retirement system comprised of three separate pension plans: the traditional plan, a defined benefit plan; the combined plan, a combination defined benefit/defined contribution plan; and the member-directed plan, a defined contribution plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage and deposits to a Health Reimbursement Arrangement to qualifying benefit recipients of both the traditional pension and the combined plans. This trust is also used to fund health care for member-directed plan participants, in the form of a Retiree Medical Account (RMA). At retirement or refund, member directed plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

In order to qualify for postemployment health care coverage, age and service retirees under the traditional pension and combined plans must have twenty or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS meets the definition of an Other Post Employment Benefit (OPEB) as described in GASB Statement 75. See OPERS' CAFR referenced below for additional information.

The Ohio Revised Code permits, but does not require OPERS to provide health care to its eligible benefit recipients. District to establish and amend health care coverage is provided to the Board in Chapter 145 of the Ohio Revised Code.

Disclosures for the health care plan are presented separately in the OPERS financial report. Interested parties may obtain a copy by visiting https://www.opers.org/financial/reports.shtml, by writing to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling (614) 222-5601 or 800-222-7377.

Funding Policy

The Ohio Revised Code provides the statutory District requiring public employers to fund postemployment health care through their contributions to OPERS. A portion of each employer's contribution to OPERS is set aside to fund OPERS health care plans.

Employer contribution rates are expressed as a percentage of the earnable salary of active members. In 2019 and 2018, state and local employers contributed at a rate of 14% of earnable salary. This is the maximum employer contribution rates permitted by the Ohio Revised Code. Active member contributions do not fund health care.

Each year, the OPERS Board determines the portion of the employer contribution rate that will be set aside to fund health care plans. The portion of employer contributions allocated to health care for members in the traditional plan and combined plan was 0% for 2019 and 2018. The portion of employer contributions allocated to health care for members in the member-direct plan was 4% during 2019 and 2018.

The OPERS Board is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care provided. Payment amounts vary depending on the number of covered dependents and the coverage selected.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Plan Description - Ohio Public Employees Retirement System (continued)

Employer contribution rate are actuarially determined and are expressed as a percentage of covered payroll. The District's contractually required contributions to OPERS health care plans was \$184,030 and \$109,330 for 2019 and 2018, respectively.

Actuarial Assumptions – OPERS

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of coverage provided at the time of each valuation and the historical pattern of sharing of costs between OPERS and plan members. The total OPEB liability for the measurement period December 31, 2018 was determined using the following actuarial assumptions that follow.

	Assumptions
Valuation date	December 31, 2017
Rolled-forward measurement date	December 31, 2018

Experience study 5-year period ended December 31, 2015
Actuarial cost method Individual entry age normal

Projected salary increases,

including 3.25% inflation 3.25 to 10.75%

Projected payroll/active

member increase 3.25% per year Investment rate of return 6.00% Municipal bond rate 3.71% Single discount rate of return 3.96%

Health care cost trend Initial 10.00% to 3.25% ultimate in 2029

The total OPEB liability for the measurement period December 31, 2017 was determined using the following actuarial assumptions that follow.

Valuation date

Valuation date

December 31, 2016

Rolled-forward measurement date

December 31, 2017

Experience study 5-year period ended December 31, 2015
Actuarial cost method Individual entry age normal

Projected salary increases,

including 3.25% inflation 3.25 to 10.75%

Projected payroll/active

member increase 3.25% per year Investment rate of return 6.50% Municipal bond rate 3.31% Single discount rate of return 3.86%

Health care cost trend Initial 7.5% to 3.25% ultimate in 2028

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Actuarial Assumptions – OPERS (continued)

Pre-retirement mortality rates are based on the RP-2014 Employees Mortality Table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant Mortality Table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively.

Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled Mortality Table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 Mortality Improvement Scale to all of the above described tables.

The long-term expected rate of return on health care investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

During 2018 and 2017, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio and the Defined Contribution portfolio. The Health Care portfolio includes the assets for health care expenses for the Traditional Pension Plan, Combined Plan and Member-Directed Plan eligible members. Within the Health Care portfolio, contributions into the plans are assumed to be received continuously throughout the year based on the actual payroll payable at the time contributions are made, and health care-related payments are assumed to occur mid-year. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Health Care portfolio was a loss of 5.60% for 2018 and 15.2% for 2017.

The allocation of investment assets with the Health Care portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Assets are managed on a total return basis with a long-term objective of continuing to offer a sustainable health care program for current and future retirees. OPERS' primary goal is to achieve and maintain a fully funded status for the benefits provided through the defined pension plans. Health care is a discretionary benefit.

The table below displays the System's Board-approved asset allocation policy and the long-term expected rate of return for each major asset class.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Actuarial Assumptions – OPERS (continued)

200000210021200000000000000000000000000		2018
		Weighted Average
	2018	Long-Term Expected
	Target	Real Rate of Return
Asset Class	Allocation	(Arithmetic)
Fixed income	34.0%	2.42%
Domestic equities	21.0%	6.21%
Real estate	6.0%	5.98%
International equities	22.0%	7.83%
Other investments	<u>17.0%</u>	<u>5.57%</u>
Total	100.0%	<u>5.16%</u>
		2017
		2017 Weighted Average
	2017	Weighted Average
Asset Class	2017 Target Allocation	Weighted Average Long-Term Expected
Asset Class Fixed income	Target	Weighted Average Long-Term Expected Real Rate of Return
Fixed income	Target <u>Allocation</u>	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic)
	Target Allocation 34.0%	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic) 1.88%
Fixed income Domestic equities	Target Allocation 34.0% 21.0%	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic) 1.88% 6.37%
Fixed income Domestic equities Real estate	Target <u>Allocation</u> 34.0% 21.0% 6.0%	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic) 1.88% 6.37% 5.91%

^{*} Building block method whereby best-estimate ranges of expected future returns are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

Discount rate A single discount rate of 3.96% and 3.85% were used to measure the OPEB liability on the measurement dates of December 31, 2018 and 2017. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single discount rate was based on an expected rate of return on the health care investment portfolio of 6.00% and 6.50% and a municipal bond rate of 3.71% and 3.31% for the measurement dates of December 31, 2018 and 2017, respectively. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be met at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through the year 2031. As a result, the long-term expected rate of return on health care investments was applied to projected costs through the year 2031, and the municipal bond rate was applied to all health care costs after that date.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Sensitivity of the District's Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate The following table presents the District's proportionate share of the net OPEB liability calculated using the single discount rate of 3.96%, and the expected net OPEB liability if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate for December 31, 2018.

		1% Decrease]	Discount Rate		1% Increase
	_	(2.96%)		(3.96%)	_	(4.96%)
District's proportionate share of the						
net OPEB liability	\$	63,912,756	\$	49,956,323	\$	38,857,270

The following table presents the District's proportionate share of the net OPEB liability calculated using the single discount rate of 3.85%, and the expected net OPEB liability if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate for December 31, 2017.

		1% Decrease]	Discount Rate		1% Increase
	_	(2.85%)		(3.85%)	_	(4.85%)
District's proportionate share of the						
net OPEB liability	\$	56,369,174	\$	42,429,314	\$	31,152,106

Sensitivity of the District's Proportionate Share of the Net OPEB Liability to Changes in the Health Care Cost Trend Rate Changes in the health care cost trend rate may also have a significant impact on the net OPEB liability.

Retiree health care valuations use a health care cost-trend assumption that changes over several years built into the assumption. The near-term rates reflect increases in the current cost of health care; the trend starting in 2019 is 10.00%. If this trend continues for future years, the projection indicates that years from now virtually all expenditures will be for health care. A more reasonable alternative is that in the not-too-distant future, the health plan cost trend will decrease to a level at, or near, wage inflation. On this basis, the actuaries' project premium rate increases will continue to exceed wage inflation for approximately the next decade, but by less each year, until leveling off at an ultimate rate, assumed to be 3.25% in the most recent valuation.

The following table presents the net OPEB liability calculated using the assumed trend rates, and the expected net OPEB liability if it were calculated using a health care cost trend rate that is 1% lower or 1% higher than the current rate for December 31, 2018.

Health Care Cost

			пе	Current	
	1%	<u>Decrease</u>	Ī	Discount Rate	1% Increase
District's proportionate share of the net OPEB liability	\$	48,018,864	\$	49,956,323	\$ 52,187,754

The following table presents the net OPEB liability calculated using the assumed trend rates, and the expected net OPEB liability if it were calculated using a health care cost trend rate that is 1% lower or 1% higher than the current rate for December 31, 2017.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

			Hea	Ith Care Cost	
				Current	
	1%	6 Decrease	<u>D</u>	iscount Rate	1% Increase
District's proportionate share of the					
net OPEB liability	\$	40,595,808	\$	42,429,314	\$ 44,323,277

Assumption Changes Since the Prior Measurement Date The OPERS Board voted to lower the investment return assumption for its health care investment portfolio from 6.50% to 6.00%. Municipal bond rate increased from 3.31% to 3.71% and the single discount rate increased from 3.85% to 3.96%. The health care cost trend rate also increased from 7.50% initial, 3.25% ultimate in 2028 to 10.00% initial, 3.25% ultimate in 2029.

The net OPEB liability for OPERS as of December 31, 2019, was measured as of December 31, 2018. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The District's proportion of the net OPEB liability was based on the District's share of contributions to the OPEB plan relative to the contributions of all participating entities. Subsequent payments made during the current fiscal year are accounted for as deferred outflows. The following table reflects the proportionate share of OPEB expense for the current and prior years. The related deferred outflows and deferred inflows of resources associated with the OPEB liability are presented below.

District's proportionate share of net OPEB liability at December 31, 2019:

	OPERS
Proportion of the net OPEB liability prior measurement date	0.390720%
Proportion of the net OPEB liability current measurement date	0.383170%
Change in proportionate share	(0.007550%)
Proportionate share of the net OPEB liability	\$ 49,956,323
OPEB expense	\$ 5,165,609

At December 31, 2019, the District reported deferred outflow and inflow of resources related to OPEB liabilities from OPERS OPEB plan, based on December 31, 2018 measurement, as indicated in the table below:

	 OPERS
Deferred outflow of resources	
Difference between expected and actual experience	\$ 16,916
Change in assumptions	1,610,652
Difference between projected and actual	
earnings on plan investments	2,290,203
Differences in employer contributions	
and change in proportionate share	926,937
Contributions subsequent to the measurement date	 184,030
Total deferred outflow of resources	\$ 5,028,738

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

OPEB Liabilities, Deferred Outflows, Deferred Inflows and OPEB Expense - OPERS

Deferred inflow of resources	
Difference between expected and actual experience	\$ 135,547
Differences in employer contributions	
and change in proportionate share	 610,012
Total deferred inflow of resources	\$ 745,559

The \$184,030 reported as deferred outflows of resources related to OPEB resulting from the District's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ending December 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

	 Total
Fiscal year ending December 31:	
2020	\$ 2,339,294
2021	238,057
2022	368,067
2023	 1,153,731
:	\$ 4,099,149

At December 31, 2018, the District reported its proportionate share of net OPEB liabilities and OPEB expense from OPERS, based on December 31, 2017 measurement, as displayed in the subsequent table.

	_	OPERS
Proportion of the net OPEB		
liability prior measurement date		0.364608%
Proportion of the net OPEB		
liability current measurement date		0.390720%
Change in Proportionate Share		0.026112%
Proportionate share of the net OPEB		
liability	\$	42,429,314
OPEB expense	\$	4,467,831

At December 31, 2018, the District reported deferred outflow and inflow of resources related to OPEB liabilities from OPERS OPEB plan, based on December 31, 2017 measurement, as indicated in the table below:

	 OPERS
Deferred outflow of resources	
Change in assumptions	\$ 3,089,304
Differences in employer contributions	
and change in proportionate share	1,776,093
Difference between expected and	
actual experience	 33,052
Total deferred outflow of	
resources	\$ 4,898,449

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 8: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

OPEB Liabilities, Deferred Outflows, Deferred Inflows and OPEB Expense - OPERS

Deferred inflow of resources

Difference between projected and actual earnings on plan investments

Total deferred inflow of resources

\$ <u>3,160,701</u> \$ <u>3,160,701</u>

Employer contributions as a percent of covered payroll towards OPEB plans were 1% for the 2017, 0% percent thereafter. OPERS' employer healthcare contributions for the 2017 were 1% of covered payroll or \$602,885. No portion of the required 14% was allocated to healthcare in 2018.

Note 9: Deferred Compensation Plans

Under a deferred compensation program, the District offers two plans created in accordance with Internal Revenue Code Section 457 (IRC 457). Eligible employees of the District may elect to participate in either the Voya or the Ohio Public Employees Deferred Compensation Plan, collectively, the "Plans." Employees may also elect to participate in both plans. The Plans allow employees to defer a portion of their compensation until future years. The deferred compensation is not available to employees until termination, retirement, death, or an unforeseen financial emergency, as defined in IRC 457.

The District follows the provisions of GASB Statement No. 32, "Accounting and Financial Reporting for Internal Revenue Code Section 457, Deferred Compensation Plans". In accordance with the provisions of GASB Statement No. 32, at December 31, 2019, the assets of both plans met the applicable trust requirements and are therefore excluded from the District's financial statements.

Note 10: Risk Management

The District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District maintains an insurance reserve to account for and finance its uninsured risks of property damage. The District is self-insured for workers' compensation and purchases commercial insurance for other specific types of coverage. There were no significant reductions in insurance coverage from the prior year. Claim settlements and judgments not covered by commercial insurance and the insurance reserve are covered by operating resources. The amount of settlements did not exceed insurance coverage for each of the past three years.

Claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. The change in the estimate for workers' compensation claims is as follows:

	Ве	eginning			Inc	crease in]	Ending
	В	alance	Cla	ims Paid	E	stimate	E	Balance
2019	\$	51,263	\$	(110,644)	\$	168,556	\$	109,175
2018	\$	72,533	\$	(21,270)	\$	_	\$	51,263

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 10: Risk Management (continued)

Estimated liabilities are not material with respect to the financial position of the District. The claims liability is included in other accrued liabilities in the accompanying statements of net position and the balance as of December 31, 2019 is estimated to be paid during the year ending December 31, 2020. The District's insurance reserves as of December 31, 2019 and 2018 were \$20,160,802 and \$21,004,774; respectively, and are included in short-term investments on the District's statements of net position.

Employee Health Benefits

The District manages the hospital/medical, dental, vision, prescription and hearing insurance benefits for its employees on a self-insured basis using an accrued liability account that is included in the other accrued liabilities in the accompanying statements of net position. A third-party administrator processes and pays the claims. An excess coverage insurance (stop loss) policy covers claims in excess of \$150,000 per claim, per year.

The claims liabilities of \$998,337 and \$1,017,297 reported at December 31, 2019, and 2018, were estimated by reviewing current claims and is based on the requirements of Governmental Accounting Standards Board Statement No. 30 which requires that a liability for unpaid claims costs, including estimates of costs relating to incurred but not reported claims, be reported. The estimate was not affected by incremental claim adjustment expenses and does not include other allocated or unallocated claims adjustment expenses. The health claims liability is included in other accrued liabilities in the accompanying statements of net position and the balance as of December 31, 2019 is estimated to be paid during the year ending December 31, 2020. The balance as of December 31, 2018 was paid during the year ending December 31, 2019.

Changes in the claims liability amounts in 2019 and 2018 were as follows:

	Beginning of	Current year	Claims	
	Year	Claims	Payment	End of Year
2019	\$ 1,017,297	\$ 9,800,568	\$ (9,819,528)	\$ 998,337
2018	\$ 996,419	\$ 10,359,376	\$ (10,338,498)	\$ 1,017,297

Note 11: Commitments and Contingencies

City of Pepper Pike, Ohio – SOM Center Relief Sewer Project

In August 2009, the Board of Trustees approved to enter into a Project and Financing Agreement with the City of Pepper Pike for a maximum loan amount of \$1,715,000 at a simple interest rate of 3.5%. As of December 31, 2019, and 2018, \$8,567 and \$108,567; respectively, are included in the Receivables from Federal, State and other agencies on the accompanying statements of net position. The parties entered into a revised, "interest-free" repayment agreement, to repay the loan over a five-year period.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 11: Commitments and Contingencies (continued)

Combined Sewer Overflows Long-Term Control Plan

The Combined Sewer Overflow (CSO) Consent Decree between the District and US EPA, US DOJ, Ohio EPA, and the Ohio Attorney General, entered on July 7, 2011, requires the District to spend \$3 Billion (in 2009 dollars) to reduce combined CSO into Lake Erie over a 25-year implementation period, through 2036. The Consent Decree requires the District to construct multiple projects specified in the appendices of the Consent Decree that are intended to upgrade capacity at each of its three wastewater treatment plants, make improvements to its collection system, construct green infrastructure, and complete both federal and state Supplemental Environmental Projects, all as specifically described. Failure of the District to complete any of the required projects in accordance with the Consent Decree could result in penalties as set forth in the Consent Decree. As of December 31, 2019, and 2018, the District did not anticipate any failures that resulted in such penalties.

Other Litigation

The District, in the normal course of its activities, is involved in various other claims and pending litigation. In the opinion of District management, the disposition of these other matters is not expected to have a material adverse effect on the financial position of the District.

Note 12: Fair Value Measurements

The District uses a three-level fair value hierarchy that categorizes assets and liabilities measured at fair value based on the observability of the inputs utilized in the valuation. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs in which little or no market data exists, therefore, requiring an entity to develop its own valuation assumptions. U.S. Government Obligations and Fixed Income Securities are valued at the closing price reported on the over-the-counter market on which the individual securities are traded.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 12: Fair Value Measurements (continued)

Financial assets at December 31, 2019 consisted of the following:

					Total at
		Level 1	Level 2	 Level 3	 12/31/2019
Short -Term Investments					
Money Market Funds	\$	192,657,143	\$ -	\$ -	\$ 192,657,143
Certificates of Deposit		-	4,154,493	=	4,154,493
Fixed Income Securities		-	13,146,322	-	13,146,322
U.S. Gov't Obligations		-	73,217,127	-	73,217,127
Long-Term Investments					
Fixed Income Securities		-	16,260,427	-	16,260,427
U.S. Gov't Obligations		-	13,115,441	-	13,115,441
Revenue Bond Debt Service F	<u>und</u>				
Money Market Funds		4,931	-	-	4,931
U.S. Gov't Obligations		<u> </u>	 12,754,313	 <u>-</u>	 12,754,313
	\$	192,662,074	\$ 132,648,123	\$ _	\$ 325,310,197

Financial assets at December 31, 2018 consisted of the following:

		T 14	T 12	T 12	Total at
		Level 1	 Level 2	 Level 3	 12/31/2018
Short -Term Investments					
Money Market Funds	\$	156,665,182	\$ -	\$ -	\$ 156,665,182
Certificates of Deposit		-	4,558,351	-	4,558,351
US Treasury Bills		4,981,880	-	-	4,981,880
Fixed Income Securities		-	60,705,978	-	60,705,978
U.S. Gov't Obligations		-	39,746,345	-	39,746,345
Long-Term Investments					
Fixed Income Securities		-	4,978,067	-	4,978,067
U.S. Gov't Obligations		-	5,018,419	-	5,018,419
Revenue Bond Debt Service F	<u>und</u>				
Money Market Funds		3,928	-	-	3,928
U.S. Gov't Obligations		<u>-</u>	 14,214,485	 <u>-</u>	 14,214,485
	\$	161,650,990	\$ 129,221,645	\$ -	\$ 290,872,635

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 13: Changes in Accounting Principles

For the year ended December 31, 2019, the District implemented the following Governmental Accounting Standards issued by the Governmental Accounting Standards Board (GASB):

GASB Statement No. 84, *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. Activities meeting the criteria should be reported in a fiduciary fund in the basic financial statements. The implementation of this GASB pronouncement did not result in any changes to the District's financial statements.

GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. This Statement requires that additional essential information related to debt be disclosed in notes to the financial statements, including: unused lines of credit, assets pledged as collateral for the debt and terms specified in debt agreements related to significant events with finance-related consequences including default, termination, and subjective acceleration clauses. These disclosures were incorporated in the District's 2019 Notes to the Financial Statements; however, there was no effect on beginning net position.

GASB Statement No. 90, *Majority Equity Interests, and amendment to GASB 14 and 61*. This statement modified previous guidance for reporting a government's equity interest in a legally separate organization. This statement also provides guidance for reporting a component unit if a government acquires a 100% equity interest in the component unit. The implementation of this GASB pronouncement did not result in any changes to the District's financial statements.

GASB Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. This Statement was issued in May 2020 and extends the effective dates of certain accounting and financial reporting provisions in Statements and Implementation Guides that were first effective for reporting periods beginning after June 15, 2018. The District evaluated implementing these certain GASB pronouncements based on the guidance in GASB 95.

GASB Implementation Guide No. 2017-3, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (and Certain Issues Related to OPEB Plan Reporting), issued in November, 2017, provides guidance that clarifies, explains, or elaborates on the requirements of Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, as amended, and Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended. These changes were incorporated in the District's 2019 financial statements; however, there was no effect on beginning net position.

GASB Implementation Guide No. 2018-1, *Implementation Guidance Update* -2018, issued in May 2018, provides guidance that clarifies, explains or elaborates on GASB Statements. The requirements of this Implementation Guide apply to the financial statements of all state and local governments unless narrower applicability is specifically provided for in the pronouncement addressed by a question and answer. These changes were incorporated in the District's 2019 financial statements; however, there was no effect on beginning net position.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 13: Changes in Accounting Principles (continued)

GASB Implementation Guide No. 2019-2, *Fiduciary Activities*, issued in June 2019, provides guidance to address issues related to accounting and financial reporting for fiduciary activities in accordance with the requirements of GASB Statement No. 84. The implementation of this GASB Implementation Guide did not result in any changes to the District's financial statements.

Pronouncements Issued but Not Effective:

GASB Statement No. 83, Certain Asset Retirement Obligations (AROs). This Statement requires a governmental entity that has legal obligation (laws and regulatory requirements, court judgements, contracts, etc.) to perform future asset retirement activities related to its tangible capital assets to recognize a liability, and a corresponding deferred outflow of resources. A liability must be recognized by a government that will eventually retire, dispose of, or environmentally remediate upon retirement, a capital asset if that retirement or disposal carries with it legally enforceable obligations. Measurement of the liability and initial deferred outflow is based on the best estimate of the amount of the current value of outlays expected to be incurred. Annually, the deferred outflow is expensed over the remaining life of the capital asset and evaluated to determine whether the estimate of the liability continues to be appropriate. GASB subsequently issued GASB Statement No. 95, which deferred the effective date of this standard to reporting periods beginning after June 15, 2019. The District has not yet determined the impact that this GASB pronouncement will have on its financial statements and disclosures.

GASB Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. GASB subsequently issued GASB Statement No. 95, which deferred the effective date of this standard to reporting periods beginning after June 15, 2021. The District has not yet determined the impact that this GASB pronouncement will have on its financial statements and disclosures.

GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period, issued in June 2018, establishes guidance designed to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period by simplifying accounting for interest cost incurred before the end of a construction period. GASB subsequently issued GASB Statement No. 95, which deferred the effective date of this standard to reporting periods beginning after December 15, 2020. The District has not yet determined the impact that this GASB pronouncement will have on its financial statements and disclosures.

GASB Implementation Guide No. 2019-1, *Implementation Guidance Update—2019*, issued in April 2019, provides guidance that clarifies, explains, or elaborates on GASB Statements. GASB subsequently issued GASB Statement No. 95, which deferred the effective date of this implementation guide to reporting periods beginning after June 15, 2020. The District has not yet determined the impact that this GASB implementation guide will have on its financial statements and disclosures.

Notes to the Basic Financial Statements

December 31, 2019 and 2018

Note 13: Changes in Accounting Principles (continued)

Pronouncements Issued but Not Effective (continued):

GASB Implementation Guide No. 2019-3, *Leases*, issued in August 2019, provides guidance that clarifies, explains, or elaborates on the requirements of Statement No. 87, *Leases*. GASB subsequently issued GASB Statement No. 95, which deferred the effective date of this implementation guide to reporting periods beginning after June 15, 2021. The District has not yet determined the impact that this GASB implementation guide will have on its financial statements and disclosures.

Note 14: Subsequent Events

Subsequent to year-end, the District's investment portfolio and/or the investments of the pension and other employee benefit plan in which the District participates, fluctuated in fair value, consistent with the fluctuation in financial markets. However, because the values of the individual investments fluctuate with market conditions, and due to market volatility, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined.

The United States and the State of Ohio have declared a state of emergency in March 2020 due to the global Coronavirus Disease (COVID-19) pandemic. The financial impact of COVID-19 will impact subsequent periods, however the impact on the future operating revenues and expenses cannot be estimated at this time.

In February of 2020, the District refunded a portion of its 2014A bonds by issuing Wastewater Improvement Refunding Bonds Series 2020 in the amount of \$244,895,000.

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Required Supplementary Information

Schedule of the District's Proportionate Share of the Net Pension Liability and Asset Ohio Public Employees Retirement System - Traditional and Combined Plans

For the Last Six Years *

Traditional Plan		2019		2018	_	2017		2016		2015		2014
District's Proportion of the Net Pension Liability		0.354457%		0.362813%		0.341986%		0.336154%		0.336024%		0.336024%
District's Proportionate Share of the Net Pension Liability	\$	97,078,586	\$	56,918,326	\$	77,659,205	\$	58,226,111	\$	40,528,251	\$	39,612,852
District's Covered Payroll	\$	48,060,622	\$	52,309,025	\$	40,870,702	\$	49,435,775	\$	48,528,228	\$	42,139,663
District's Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll		201.99%		108.81%		190.01%		117.78%		83.51%		94.00%
Plan Fiduciary Net Position as a Percentage of the Pension Liability		74.70%		84.66%		77.25%		81.08%		86.45%		n/a
Combined Plan		2019		2018		2017		2016		2015		2014
Combined Plan District's Proportion of the Net Pension Asset		2019 0.634615%		2018 0.684592%		2017 0.583779%		2016 0.531290%		2015 0.535543%		2014 0.535543%
	\$		\$		\$		\$		\$		\$	
District's Proportion of the Net Pension Asset	\$ \$	0.634615%	\$ \$	0.684592%	\$ \$	0.583779%	* *	0.531290%	* *	0.535543%	\$ \$	0.535543%
District's Proportion of the Net Pension Asset District's Proportionate Share of the Net Pension Asset	•	0.634615% 709,645		0.684592% 931,953	•	0.583779%	-	0.531290% 258,537		0.535543% 206,196	•	0.535543%

^{*} Amounts presented for each year were determined as of the District's measurement date, which is the prior year-end. Although this schedule is intended to reflect information for ten years, information prior to 2014 is not available. An additional column will be added each year.

Required Supplementary Information

Schedule of the District's Proportionate Share of the Net OPEB Liability Ohio Public Employees Retirement System

For the Last Three Years *

	 2019	 2018	 2017
District's Proportion of the Net OPEB Liability	0.383170%	0.390720%	0.364608%
District's Proportionate Share of the Net OPEB Liability	\$ 49,956,323	\$ 42,429,314	\$ 36,826,620
District's Covered Payroll	\$ 55,780,664	\$ 60,288,529	\$ 46,660,550
District's Proportion of the Net OPEB Liability as a Percentage of Its Covered Payroll	89.56%	70.38%	78.92%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	46.33%	54.14%	n/a

^{*} Amounts presented for each year were determined as of the District's measurement date, which is the prior year-end. Although this schedule is intended to reflect information for ten years, information prior to 2017 is not available. An additional column will be added each year.

Required Supplementary Information

Schedule of the District Contributions Ohio Public Employees Retirement System - Traditional Plan

For the Last Ten Years

		2019		2018		2017		2016		2015
Contractually Required Contributions	\$	6,792,330	\$	6,728,485	\$	6,800,173	\$	4,904,484	\$	5,932,293
Contributions in Relation to Contractually Required Contributions		(6,792,330)		(6,728,485)		(6,800,173)		(4,904,484)		(5,932,293)
Contribution Deficiency (Excess)	\$		\$		\$		\$		\$	<u>-</u>
Covered Payroll	\$	48,516,643	\$	48,060,622	\$	52,309,025	\$	40,870,702	\$	49,435,775
Contribution as a Percentage of Covered Payroll		14.00%		14.00%		13.00%		12.00%		12.00%
		2014		2012						
		2014		2013		2012		2011		2010
Contractually Required Contributions	\$	5,823,387	\$	5,478,156	\$	5,244,880	\$	4,944,124	\$	4,839,569
Contractually Required Contributions Contributions in Relation to Contractually Required Contributions	\$		\$		\$		\$		\$	
7	\$	5,823,387	\$	5,478,156	\$	5,244,880	\$	4,944,124	\$	4,839,569
Contributions in Relation to Contractually Required Contributions	\$ \$	5,823,387	\$ \$	5,478,156	*	5,244,880	\$ \$	4,944,124	\$ \$	4,839,569

Required Supplementary Information

Schedule of the District Contributions Ohio Public Employees Retirement System - Combined Plan

For the Last Ten Years

	 2019	 2018	 2017	 2016	 2015
Contractually Required Contributions	\$ 352,040	\$ 382,655	\$ 391,438	\$ 262,724	\$ 273,026
Contributions in Relation to Contractually Required Contributions	(352,040)	(382,655)	(391,438)	(262,724)	(273,026)
Contribution Deficiency (Excess)	\$ 	\$ 	\$ -	\$ 	\$
Covered Payroll	\$ 2,514,571	\$ 2,733,250	\$ 3,011,061	\$ 2,189,365	\$ 2,275,217
Contribution as a Percentage of Covered Payroll	14.00%	14.00%	13.00%	12.00%	12.00%
	 2014	 2013	 2012	 2011	2010
Contractually Required Contributions	\$ 267,975	\$ 252,089	\$ 241,354	\$ 227,514	\$ 222,703
Contributions in Relation to Contractually Required Contributions	(267,975)	(252,089)	(241,354)	(227,514)	(222,703)
Contribution Deficiency (Excess)	\$ 	\$ 	\$ -	\$ 	\$ -
Covered Payroll	\$ 2,233,128	\$ 1,939,145	\$ 2,413,542	\$ 2,275,143	\$ 2,474,477
Contribution as a Percentage of Covered Payroll	12.00%	13.00%	10.00%	10.00%	9.00%

Required Supplementary Information

Schedule of the District Contributions Ohio Public Employees Retirement System - OPEB

For the Last Four Years *

	 2019	 2018	2017	 2016
Contractually Required OPEB Contributions	\$ 184,030	\$ 109,330	\$ 602,885	\$ 933,211
Contributions in Relation to Contractually Required Contributions	(184,030)	(109,330)	(602,885)	(933,211)
Contribution Deficiency (Excess)	\$ 	\$ 	\$ 	\$
Covered Payroll	\$ 57,316,385	\$ 55,780,664	\$ 60,288,529	\$ 46,660,550
OPEB Contribution as a Percentage of Covered Payroll	0.32%	0.20%	1.00%	2.00%

^{*} Amounts presented for each year were determined as of the District's measurement date, which is the prior year-end. Although this schedule is intended to reflect information for ten years, information prior to 2016 is not available. An additional column will be added each year.

Notes to Required Supplementary Information

For the Years Ended December 31, 2019 and 2018

Note 1: Net Pension Liability

Changes in Assumptions - OPERS Traditional and Combined Plans, Net Pension Liability

Amounts reported in the required supplementary information for OPERS Traditional and Combined Plans incorporate changes in assumptions used by OPERS in calculating the pension liability. These assumptions are presented below for the periods indicated:

Key Methods and Assumptions in Valuing Total Pension Liability - 2019

	OPERS	OPERS
	<u>Traditional plan</u>	Combined plan
Valuation Date	December 31, 2018	December 31, 2018
Experience Study	5-year period ended	5-year period ended
	December 31, 2015	December 31, 2015
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Actuarial Assumptions:		
Investment Rate of Return	7.20%	7.20%
Wage Inflation	3.25%	3.25%
Projected Salary Increases,		
including 3.25% inflation	3.25 to 10.75%	3.25 to 8.25%
COLA or Ad Hoc COLA:		
Pre-Jan 7, 2013 Retirees	3% Simple	3% Simple
Post-Jan 7, 2013 Retirees	3% Simple through 2018	3% Simple though 2018
	then 2.15% Simple	then 2.15% Simple

Key Methods and Assumptions in Valuing Total Pension Liability – 2017-2018

Valuation Date	OPERS <u>Traditional plan</u> December 21, 2017	OPERS Combined plan
	December 31, 2017	December 31, 2017
Experience Study	5-year period ended	5-year period ended
	December 31, 2015	December 31, 2015
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Actuarial Assumptions:		
Investment Rate of Return	7.50%	7.50%
Wage Inflation	3.25%	3.25%
Projected Salary Increases,		
including 3.25% inflation	3.25 to 10.75%	3.25 to 8.25%
COLA or Ad Hoc COLA:		
Pre-Jan 7, 2013 Retirees	3% Simple	3% Simple
Post-Jan 7, 2013 Retirees	3% Simple through 2018	3% Simple though 2018
	then 2.15% Simple	then 2.15% Simple

Notes to Required Supplementary Information (continued)

For the Years Ended December 31, 2019 and 2018

Note 1: Net Pension Liability (continued)

Changes in Assumptions – OPERS Traditional and Combined Plans, Net Pension Liability (continued)

Key Methods and Assumptions in Valuing Total Pension Liability – 2016 and prior

	OPERS	OPERS
	<u>Traditional plan</u>	Combined plan
Valuation Date	December 31, 2015	December 31, 2015
Experience Study	5-year period ended	5-year period ended
	December 31, 2010	December 31, 2010
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Actuarial Assumptions:		
Investment Rate of Return	8.00%	8.00%
Wage Inflation	3.75%	3.75%
Projected Salary Increases,		
including 3.75% inflation	4.25 to 10.05%	4.25 to 8.05%
COLA or Ad Hoc COLA:		
Pre-Jan 7, 2013 Retirees	3% Simple	3% Simple
Post-Jan 7, 2013 Retirees	3% Simple through 2018	3% Simple though 2018
	then 2.8% Simple	then 2.8% Simple

For 2019, the OPERS Board adopted a change in the investment return assumption, reducing it from 7.5% to 7.2%.

Mortality rates - Amounts reported beginning in 2017 use mortality rates based on the RP-2014. Healthy Annuitant mortality table. For males, Healthy Annuitant Mortality tables were used, adjusted for mortality improvement back to the observation period base of 2006 and then established the base year as 2015. For females, Healthy Annuitant Mortality tables were used, adjusted for mortality improvements back to the observation period base year of 2006 and then established the base year as 2010. The mortality rates used in evaluating disability allowances were based on the RP-2014 Disabled mortality tables, adjusted for mortality improvement back to the observation base year of 2006 and then established the base year as 2015 for males and 2010 for females. Mortality rates for a particular calendar year for both healthy and disabled retiree mortality tables are determined by applying the MP-2015 mortality improvement scale to the above described tables.

Amounts reported for 2016 and prior use mortality rates based on the RP-2000 Mortality Table projected 20 years using Projection Scale AA. For males, 105 percent of the combined healthy male mortality rates were used. For females, 100 percent of the combined healthy female mortality rates were used. The mortality rates used in evaluating disability allowances were based on the RP-2000 mortality table with no projections. For males, 120 percent of the disabled female mortality rates were used set forward two years. For females, 100 percent of the disabled female mortality rates were used.

Notes to Required Supplementary Information (continued)

For the Years Ended December 31, 2019 and 2018

Note 2: Net OPEB Liability

Changes in Assumptions - OPERS OPEB

For 2019, the OPERS Board adopted a change in the investment return assumption, reducing it from 6.5% to 6.0%. For 2019, the single discount rate changed from 3.85% in 2018 to 3.96%. Prior to 2018, the single discount rate was 4.23%. For 2019, the municipal bond rate changed from 3.31% to 3.71%. For 2019, the health care cost trend rate changed from 7.5% initial, 3.25%, ultimate in 2028 to 10% initial, 3.25% ultimate in 2029.

Supplementary Information Schedule of Revenues, Expenses and Changes in Net Position – Budget to Actual

For the Year Ended December 31, 2019

								Variance with
		0 : : 1		E' 1			F	inal Budget
	Original Budget		Final		A atual		Positive (Negative)	
Revenues:		Budget		Budget		Actual		(Negative)
User Charges:								
Billed	\$	368,509,818	\$	368,509,818	\$	383,431,978	\$	14,922,160
Other Revenue	Ф		Ф		Ф		Ф	
Other Revenue		1,108,165		1,108,165		1,615,509		507,344
Total Revenues		369,617,983		369,617,983		385,047,487		15,429,504
Expenses:								
Salary and Wages		60,923,585		60,929,585		57,081,051		3,848,534
Fringe Benefits		25,887,431		25,534,394		20,755,978		4,778,416
Power		11,335,014		10,724,143		9,008,321		1,715,822
Materials and Supplies		8,452,100		9,390,301		8,602,651		787,650
Collection Fees		8,826,600		8,826,600		8,679,625		146,975
Gas		1,809,319		1,809,319		1,285,320		523,999
Chemicals		3,326,980		3,326,980		3,131,901		195,079
Repairs and Maintenance		3,993,488		3,993,488		3,244,813		748,675
Solids Handling		2,150,715		1,874,306		1,450,778		423,528
Water		1,089,492		1,089,492		1,065,318		24,174
Professional Services		30,659,495		30,959,111		27,648,097		3,311,014
Insurance		1,350,000		1,350,000		959,418		390,582
Judgements and Awards		190,000		190,000		23,501		166,499
Other Operating Expenses		29,045,951		29,042,451		23,074,405		5,968,046
Capitalized Construction Costs		(8,500,000)		(8,500,000)		(5,778,398)		(2,721,602)
Depreciation		73,148,947		73,148,947		80,473,794		(7,324,847)
Impact of GASB 68 and 75						20,433,907		(20,433,907)
Total Operating Expenses		253,689,117		253,689,117		261,140,480		(7,451,363)
Excess of Revenues Over								
Operating Expenses	\$	115,928,866	\$	115,928,866	\$	123,907,007	\$	7,978,141

See accompanying notes to supplementary information.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Supplementary Information Schedule of Revenues, Expenses and Changes in Net Position - Budget to Actual

For the Year Ended December 31, 2019

Excess of Operating Revenues Over Operating Expenses	\$	123,907,007
Interest Revenue		7,843,503
Increase in Fair Value of Investments, Net		604,848
Non-Operating Grant Expenses		(177,781)
Green Infrastructure Program		(2,102,179)
Member Infrastructure Community Program		(2,331,313)
Stormwater Community Cost Share Disbursement		(8,511,830)
Loss on Disposals of Equipment		(649,659)
Interest Expense on Long-Term Debt		(60,975,839)
Federal Subsidy Revenue	,	4,801,356
Change in Net Position		62,408,113
Net Position at Beginning of Year		1,529,566,349
Net Position at End of Year	\$	1,591,974,462

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Notes to Supplementary Information Schedule of Revenues, Expenses and Changes in Net Position-Budget to Actual

For the Year ended December 31, 2019

Note 1: Summary of Significant Accounting Policies

Budgetary Basis of Accounting

The District's budget is prepared on the basis of accounting principles generally accepted in the United States of America, except that the budget does not include interest revenue, increases (decreases) in fair value of investments, interest on long-term debt, and gains and losses on equipment disposals. Formal budgetary integration is employed as a management control device during the year.

General provisions regulating the District's budget and appropriation procedures are set forth in the Ohio Revised Code. The Chief Executive Officer is required to submit the District's operating and capital budgets to the Board of Trustees and they are required to adopt such budgets by March 31 of each year. Until the final budgets are adopted, the Board of Trustees may adopt a temporary appropriation for the first three months of the year. The Board of Trustees must also approve all amendments to the budget. The level of budgetary control for the District's operation, maintenance, and minor capital outlays is on a budget center line item basis. During the fiscal year, budget center heads may transfer appropriations within their respective budget centers and from other budget centers within limitations that are subject to Board approval. The capital budget consists of major and minor capital expenditures.

Requests for capital project expenditures must be approved by the Board of Trustees and/or the Chief Executive Officer, as appropriate, and require certification of available funds by the Chief Financial Officer. Board approval is required for all operating and capital purchases of goods and services in excess of \$50,000. All budget appropriations lapse on December 31 of each year. The annual Capital Plan outlines estimated cost by project. These projects are already authorized or to be considered by the Board of Trustees. Approval of the budgets by the Board of Trustees does not in itself authorize expenses for operations and maintenance or expenditures for capital projects.



STATISTICAL SECTION (UNAUDITED)

This part of the District's Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the District's overall financial health.

Contents	Page
Financial Trends These schedules contain trend information to help the reader understand the District's financial performance and well-being and how they have changed over time.	84
Revenue Capacity These schedules contain information to help the reader assess the District's most significant revenue source, user charges.	88
Debt Capacity These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future.	96
Demographic and Economic Information These schedules offer demographic and economic indicators to help the reader understand the environment within which the District's financial activities take place.	98
Operating Information These schedules contain service and infrastructure data to help the reader understand how the information in the District's financial report relates to the services the District provides and the activities it performs.	100
Continuing Disclosure Requirements These schedules are required by Continuing Disclosure Agreement with respect to outstanding Revenue Bonds. They contain information pertinent to each of the categories above.	108

Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports and District accounting records for the relevant year.

NORTHEAST OHIO REGIONAL SEWER DISTRICT NET POSITION BY COMPONENT LAST TEN YEARS

	2019	2018	2017 (3)	2016
Net Investment in Capital Assets	\$ 1,231,285,119	\$ 1,196,966,572	\$ 1,107,066,113	\$ 990,664,879
Restricted - Stormwater Community Cost-Share	25,911,002	24,045,802	17,185,754	8,203,008
Unrestricted	334,778,341	308,553,975	328,892,633	427,487,655
Total	\$ 1,591,974,462	\$ 1,529,566,349	\$ 1,453,144,500	\$ 1,426,355,542

Note:

(1) 2012, 2011 restated to comply with GASB 65.

(2) 2014 restated to comply with GASB 68.

(3) 2017 restated to comply with GASB 75.

2010	2011 (1)	2012 (1)	2013	2014(2)	2015	
\$ 1,038,270,319	\$ 1,055,247,281	\$ 1,065,405,939	\$ 1,067,650,046	\$ 1,018,734,360	786,650,331	\$
-	-	-	-	-	-	
251,770,264	238,611,550	235,652,225	248,677,688	284,669,454	571,255,854	
\$ 1,290,040,583	\$ 1,293,858,831	\$ 1,301,058,164	\$ 1,316,327,734	\$ 1,303,403,814	1,357,906,185	\$

NORTHEAST OHIO REGIONAL SEWER DISTRICT CHANGES IN NET POSITION LAST TEN YEARS

	2019	2018	2017	2016	2015
Operating Revenues, Net - Sewage	Ф 210 00 <i>C</i> 025	f 201 522 250	Ф 272 OCA 177	f 266 040 002	# 227.570.422
Billing Agents	\$ 310,986,925	\$ 301,523,258	\$ 273,964,177	\$ 266,840,893	\$ 237,570,432
Direct Billed	27,610,406	23,142,825	22,848,020	17,970,171	16,684,685
Other (1)	1,615,509	1,392,876	2,567,476	1,972,379	5,428,088
Total Operating Revenues, Net - Sewage	340,212,840	326,058,959	299,379,673	286,783,443	259,683,205
Operating Revenues, Net - Stormwater					
Billing Agents	43,907,185	43,029,033	43,734,464	25,487,614	20,424,261
Direct Billed	927,462	935,644	766,301	765,778	322,691
Total Operating Revenues, Net - Stormwater	44,834,647	43,964,677	44,500,765	26,253,392	20,746,952
Operating Revenues, Net - District Total	385,047,487	370,023,636	343,880,438	313,036,835	280,430,157
Operating Expenses - Sewage					
Salaries and Wages	53,823,645	52,726,122	52,144,371	49,878,369	47,918,213
Fringe Benefits	40,663,563	31,535,641	29,221,894	22,495,670	14,563,011
Utilities	12,248,936	14,729,821	13,601,569	14,187,719	16,284,328
Professional and Contractual Services	25,952,405	32,255,207	32,211,644	29,842,682	21,988,568
Other (1)	9,846,136	5,708,698	4,575,795	2,587,719	3,725,796
Stormwater Indirect Cost Allocation	(4,186,298)	(3,974,441)	(3,755,359)	(3,612,532)	, , , <u>-</u>
Depreciation	80,473,794	71,733,140	71,496,416	66,605,940	62,825,528
Total Operating Expenses - Sewage	218,822,181	204,714,188	199,496,330	181,985,567	167,305,444
Operating Expenses - Stormwater					
Salaries and Wages	3,257,406	2,606,546	1,353,653	590,438	_
Fringe Benefits	526,322	382,135	196,233	82,758	_
Professional and Contractual Services	34,238,683	23,472,515	19,503,698	4,517,336	_
Other (1)	109,590	756,779	121,598	50,417	_
Stormwater Indirect Cost Allocation (7)	4,186,298	3,974,441	3,755,359	3,612,532	_
Total Operating Expenses - Stormwater	42,318,299	31,192,416	24,930,541	8,853,481	
Total Operating Expenses - District Total	261,140,480	235,906,604	224,426,871	190,839,048	167,305,444
Operating Income	123,907,007	134,117,032	119,453,567	122,197,787	113,124,713
Non-Operating Revenues (Expenses), Net					
Interest Revenue	7,843,503	5,573,074	3,833,084	2,901,760	2,526,049
Increase (Decrease) in Fair Value of	7,043,303	3,373,074	3,033,004	2,701,700	2,320,047
Investments, Net	604,848	378,689	(518,063)	494,661	(1,173,193)
Non-Operating Grant Revenue	-	521,873	206,905	223,125	1,383,547
Non-Operating Grant Expenses	(177,781)	(4,534)	(97,733)	(187,668)	(707,409)
Proceeds on Insurance Claims (2)	(177,701)	(1,551)	7,112	64,597	(707,107)
Green Infrastructure Program (4)	(2,102,179)	(1,361,640)	(1,318,460)	-	_
Member Community Infrastructure Program (4)	(2,331,313)	(4,911,520)	(3,118,863)	_	_
Stormwater Community Cost Share Disbursement (3)	(8,511,830)	(4,218,308)	(2,626,418)	(72,190)	_
Loss on Disposals of Equipment	(649,659)	(385,744)	(301,070)	(3,319,289)	(4,323,785)
Loss on Extraordinary Events	-	-	-	(1,614)	(180,025)
Interest Expense on Long-Term Debt	(60,975,839)	(59,784,224)	(58,980,224)	(60,317,727)	(62,616,911)
Federal Subsidy Revenue (5)	4,801,356	6,497,151	6,472,856	6,465,915	6,469,385
Total Non-Operating Revenues (Expenses), Net	(61,498,894)	(57,695,183)	(56,440,874)	(53,748,430)	(58,622,342)
Capital Contributions	<u> </u>				
Change in Net Position	\$ 62,408,113	\$ 76,421,849	\$ 63,012,693	\$ 68,449,357	\$ 54,502,371

⁽¹⁾ Other Non-Operating Expenses include Agreement with the Cleveland Metroparks.

⁽²⁾ Proceeds from the flood at the Southerly WWTP.

⁽³⁾ Beginning 2016, Stormwater Community Cost Share is classified to non-operating expenses.

⁽⁴⁾ Beginning 2017, Green Infrastructure Program and Member Community Infrastructure Program are classified to non-operating expenses.

⁽⁵⁾ Beginning 2010, reclassified Build America Bonds Subsidy. Refer to Note 6.

⁽⁶⁾ Restated to comply with GASB 65.

⁽⁷⁾ Beginning 2016, the District started tracking stormwater utility's indirect support costs related to District's services to reflect. what portion of these indirect, or overhead, costs should be allocated to the stormwater utility.

2014	2013	2012 (6)	2012 (6) 2011 (5)	
\$ 220,621,174	\$ 192,601,300	\$ 171,056,663	\$ 155,342,800	\$ 150,703,554
17,685,946	16,227,994	14,832,256	16,275,002	14,663,082
	960,830	1,352,457		
878,279			1,104,565	1,484,110
239,185,399	209,790,124	187,241,376	172,722,367	166,850,746
-	-	-	-	-
239,185,399	209,790,124	187,241,376	172,722,367	166,850,746
46,226,508	43,889,545	41,255,137	39,190,544	38,061,309
14,610,845	14,203,943	13,657,026	12,939,019	12,747,900
15,267,723	14,898,125	13,979,812	15,511,558	16,042,200
22,286,370	24,747,308	21,827,170	18,766,341	23,034,225
3,807,036	2,155,767	3,387,828	3,907,002	7,392,509
57,171,918	50,179,846	51,187,381	47,271,807	46,061,584
159,370,400	150,074,534	145,294,354	137,586,271	143,339,727
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
				
		-		
159,370,400	150,074,534	145,294,354	137,586,271	143,339,727
79,814,999	59,715,590	41,947,022	35,136,096	23,511,019
993,560	1,879,311	2,827,947	3,825,074	3,292,522
295,828	(417,004)	(888,925)	(150,665)	(19,034)
1,304,233	1,383,517	758,941	676,833	1,731,894
(4,259,001)	(1,520,478)	(758,941)	(676,833)	(1,731,894)
-	-	792,245	621,938	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
(3,913,066)	(340,588)	(622,504)	(1,020,704)	(45,657)
-	-		(1,188,489)	-
(59,922,594)	(51,757,865)	(44,717,920)	(43,019,109)	(26,583,173)
6,438,149	6,327,087	6,941,401	6,912,478	858,034
(59,062,891)	(44,446,020)	(35,667,756)	(34,019,477)	(22,497,308)
		920,067	6,161,822	9,437,876
\$ 20,752,108	\$ 15,269,570	\$ 7,199,333	\$ 7,278,441	\$ 10,451,587

NORTHEAST OHIO REGIONAL SEWER DISTRICT REVENUES BY TYPE LAST TEN YEARS

	2019	2018	2017	2016
Operating Revenues, Net Sewage and Stormwater Service Fees				
City of Cleveland Billing Agent	\$ 348,360,168	\$ 338,466,864	\$311,616,663	\$ 275,275,862
Other Billing Agents	6,533,942	6,085,427	6,081,978	17,052,645
Other Sewage and Stormwater Service Fees	28,537,868	24,078,469	23,614,321	18,735,949
Other Operating Revenue	1,615,509	1,392,876	2,567,476	1,972,379
Total Operating Revenues, Net	385,047,487	370,023,636	343,880,438	313,036,835
Non-Operating Revenues, Net Interest Revenue	7,843,503	5,573,074	3,833,084	2,901,760
Increase (Decrease) in Fair Value of Investments, Net	604,848	378,689	(518,063)	494,661
Proceeds from Insurance Claims	-	-	7,112	64,597
Federal Subsidy Revenue (2)	4,801,356	6,497,151	6,472,856	6,465,915
Non-Operating Grant Revenue		521,873	206,905	223,125
Total Non-Operating Revenues, Net	13,249,707	12,970,787	10,001,894	10,150,058
Capital Contributions				
Total Revenues	\$ 398,297,194	\$ 382,994,423	\$ 353,882,332	\$ 323,186,893

⁽¹⁾ Proceeds from Southerly Flood event.

⁽²⁾ Beginning 2010, reclassified Build America Bonds Subsidy. Refer to Note 6.

⁽³⁾ Proceeds from 4th floor IT fire.

2015	2014	2013	2012	2011	2010
\$ 242,170,836	\$ 206,720,248	\$ 179,391,021	\$ 159,114,027	\$ 144,326,900	\$ 140,059,765
15,823,857	13,900,926	13,210,279	11,942,636	11,015,900	10,643,789
17,007,376	17,685,946	16,227,994	14,832,256	16,275,002	14,663,082
5,428,088	878,279	960,830	1,352,457	1,104,565	1,484,110
280,430,157	239,185,399	209,790,124	187,241,376	172,722,367	166,850,746
2,526,049	993,560	1,879,311	2,827,947	3,825,074	3,292,522
(1,173,193)	295,828	(417,004)	(888,925)	(150,665)	(19,034)
- (3) -	-	792,245 (1)	621,938 (1	-
6,469,385	6,438,149	6,327,087	6,941,401	6,912,478	858,034
1,383,547	1,304,233	1,383,517	758,941	676,833	1,731,894
9,205,788	9,031,770	9,172,911	10,431,609	11,885,658	5,863,416
			920,067	6,161,822	9,437,876
\$ 289,635,945	\$ 248,217,169	\$ 218,963,035	\$ 198,593,052	\$ 190,769,847	\$ 182,152,038

NORTHEAST OHIO REGIONAL SEWER DISTRICT OPERATING EXPENSES BY TYPE LAST TEN YEARS

	2019	2018	2017	 2016
Salaries and Wages	\$ 57,081,051	\$ 55,332,668	\$ 53,498,024	\$ 50,468,807
Fringe Benefits	41,189,885	31,917,776	29,418,128	22,578,428
Power	9,008,321	11,216,797	10,052,193	10,652,319
Materials and Supplies	8,602,651	7,816,290	7,088,671	6,820,729
Collection Fees	8,679,625	8,275,350	8,506,812	8,000,246
Gas	1,285,320	1,689,079	1,326,027	1,314,239
Chemicals	3,131,901	2,617,257	2,062,888	2,390,757
Repairs and Maintenance	3,244,813	2,837,255	3,172,685	2,290,027
Solids Handling	1,450,778	1,459,652	1,546,734	1,763,205
Water	1,065,318	1,007,341	1,159,576	1,069,671
Professional Services	27,648,097	29,405,301	23,678,268	16,550,378
Insurance	959,418	882,305	762,390	764,709
All Other Expenses	23,097,906	17,875,618	18,981,336	9,627,486
Capitalized Construction Costs	(5,778,398)	(8,159,225)	(8,323,277)	(10,057,893)
Depreciation	80,473,794	 71,733,140	71,496,416	 66,605,940
Total Operating Expenses	\$ 261,140,480	\$ 235,906,604	\$ 224,426,871	\$ 190,839,048

 2015 2014		2013 2012		2011	2010	
\$ 47,918,213	\$ 46,226,508	\$ 43,889,545	\$ 41,255,137	\$ 39,190,544	\$ 38,061,309	
14,563,011	14,610,845	14,203,943	13,657,026	12,939,019	12,747,900	
12,072,308	10,247,703	9,400,085	8,068,363	9,258,484	9,879,693	
5,676,639	4,882,158	4,075,901	5,056,453	4,564,897	4,729,166	
7,870,531	7,753,358	7,812,254	6,725,143	5,975,072	5,805,347	
1,818,054	2,710,438	3,318,117	3,825,221	4,254,679	4,292,298	
2,865,628	3,152,662	1,931,902	1,641,550	1,329,150	1,293,973	
3,154,329	3,310,824	2,762,386	2,078,341	2,440,310	2,901,283	
1,170,548	2,315,896	1,446,497	1,825,201	847,246	2,190,398	
977,437	1,096,667	1,260,155	1,191,439	1,147,687	1,054,989	
6,004,935	6,468,485	10,553,455	8,917,796	8,407,259	11,998,519	
778,421	858,861	821,442	779,453	1,227,736	1,161,822	
8,353,217	7,940,886	6,774,159	6,592,367	4,506,935	5,107,521	
(8,743,355)	(9,376,809)	(8,355,153)	(7,506,517)	(5,774,554)	(3,946,075)	
 62,825,528	57,171,918	50,179,846	51,187,381	47,271,807	46,061,584	
\$ 167,305,444	\$ 159,370,400	\$ 150,074,534	\$ 145,294,354	\$ 137,586,271	\$ 143,339,727	

NORTHEAST OHIO REGIONAL SEWER DISTRICT COMMUNITIES SERVED BY THE DISTRICT AND ESTIMATED POPULATION SERVED DECEMBER 31, 2019

Municipality	Estimated Service Population (1)		Municipality	Estimated Service Population (1)	
Municipality	Population		Municipality	Population	
SUBDISTRICT 1					
Cleveland City	378,102				
SUBDISTRICT 2			SUBDISTRICT 2		
Bath Township	60		Middleburg Heights City	15,602	
Beachwood City	12,784		Moreland Hills Village	3,253	
Bedford City	-	(3)	Newburgh Heights Village	2,102	
Bedford Heights City	-	(3)	North Randall Village	1,037	
Berea City	18,702		North Royalton City	4,052	(2)
Boston Heights Village	741	(2)	Northfield Center Township	5,650	
Bratenahl Village	1,283		Northfield Village	3,524	
Brecksville City	13,314	(2)	Oakwood Village	1,619	(2)
Broadview Heights City	14,897	(2)	Olmsted Falls City	8,903	(2)
Brook Park City	18,449		Olmsted Township	8,125	(2)
Brooklyn City	10,785		Orange Village	953	(2)
Brooklyn Heights Village	1,553		Parma City	78,840	
Cleveland Heights City	45,882		Parma Heights City	20,367	
Columbia Township	2,363	(2)	Pepper Pike City	6,179	(2)
Cuyahoga Heights Village	701		Richfield Township	961	(2)
East Cleveland City	16,380		Richfield Village	3,757	(2)
Euclid City	364	(2)	Richmond Heights City	4,337	(2)
Garfield Heights City	27,888		Sagamore Hills Township	11,018	
Gates Mills Village	443	(2)	Seven Hills City	11,750	
Glenwillow Village	3	(2)	Shaker Heights City	27,856	
Highland Heights City	8,121		Solon City	147	(2)
Highland Hills Village	1,124		South Euclid City	21,315	
Hudson City	8,877	(2)	Strongsville City	25,575	(2)
Independence City	7,119		Twinsburg City	· -	(2)
Lakewood City	· -	(3)	Twinsburg Township	541	(2)
Linndale Village	164		University Heights City	13,691	
Lyndhurst City	13,540		Valley View Village	1,986	
Macedonia City	11,677		Walton Hills Village	2,137	
Maple Heights City	22,407		Warrensville Heights City	13,149	
Mayfield Heights City	18,501		Willoughby Hills City	- -	(3)
Mayfield Village	3,286				
	,		Total Subdistrict 2	579,834	
	Total Estimated Se	rvice l	Population	957,936	

⁽¹⁾ Based on U.S. Census Data and District administrative records.

⁽²⁾ Estimated population for the portion of the municipality within the service area of the District.

⁽³⁾ Service population not applicable. District serves non-residential properties only.



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NORTHEAST OHIO REGIONAL SEWER DISTRICT SEWER LARGEST CUSTOMERS OF THE DISTRICT AS OF DECEMBER 31, 2019 and NINE YEARS PRIOR

and NINE YEARS PRIOR			2019		
CVIDDACTDICT.	CONSUMPTION MCF (1)		AMOUNT BILLED	RANK	PERCENTAGE OF OPERATING REVENUE
SUBDISTRICT 1	00.027.0	Ф	0.420.404	2	2.50/
CUYAHOGA METROPOLITAN HOUSING AGENCY (2)	89,827.0	\$	8,428,494	2	2.5%
CLEVELAND WATER PLANTS	51,627.0		7,262,857	3	2.1%
CLEVELAND CLINIC (2)	66,813.4		6,301,099	4	1.9%
CUYAHOGA COUNTY JUSTICE CENTER (2)	23,899.9		2,250,731	6	0.7%
CASE WESTERN RESERVE UNIVERSITY	21,237.3		2,000,268	7	0.6%
UNIVERSITY HOSPITALS (2)	19,998.1		1,868,661	8	0.5%
METROHEALTH MEDICAL CENTERS	15,677.1		1,431,891	9	0.4%
MICELI DAIRY PRODUCTS	5,292.5		1,288,858	10	0.4%
ARCELOR MITTAL STEEL	9,531.6		988,854	13	0.3%
VETERANS ADMINISTRATION HOSPITALS (2)	9,050.1		854,604	14	0.3%
CLEVELAND STATE UNIVERSITY (2)	8,729.7		824,965	15	0.2%
OBERLIN FARMS DAIRYMENS	5,692.3		789,189	16	0.2%
MEDICAL CENTER CO	8,357.0		784,770	17	0.2%
AE OWNER, LLC	7,903.1		744,231	18	0.2%
SHERWIN WILLIAMS (2)	6,480.2		610,869	21	0.2%
CLEVELAND BOARD OF EDUCATION	6,260.6		592,216	23	0.2%
COC, DEPT OF PORT CONTROL	5,440.5		513,537	26	0.2%
FERRO CORP (2)	, <u>-</u>		-	-	_
CLEVELAND METROPARKS ZOO	=		-	-	_
COLUMBUS ROAD REALTY	_		_	-	_
Total Subdistrict 1	361,817.4		37,536,094		11.1%
SUBDISTRICT 2					
SUMMIT COUNTY	114,610.1		11,838,391	1	3.5%
ALUMINUN CORPORATION OF AMERICA (ALCOA)	25,415.3		2,407,305	5	0.7%
NASA	12,687.3		1,206,004	11	0.4%
THE K&D GROUP	11,739.4		1,106,383	12	0.3%
FOREST CITY MANAGEMENT (2)	7,545.8		717,480	19	0.2%
FORD MOTOR CORPORATION	6,899.7		667,054	20	0.2%
CUYAHOGA COMMUNITY COLLEGE (2)	6,042.5		604,124	22	0.2%
SOUTHWEST HOSPITAL	5,680.0		540,320	24	0.2%
POLYMER ADDITIVES, INC	5,524.1		527,805	25	0.2%
ZEHMAN & WOLFE MANAGEMENT			-	_	0.270
Total Subdistrict 2	196,144.2		19,614,866		5.9%
Grand Total	557,961.6	\$	57,150,960		17.0%

⁽¹⁾ One (1) MCF = one thousand cubic feet = 7,480 gallons.

Source: 2019 District accounting records and City of Cleveland Division of Water billing records.

⁽²⁾ Amount represents Subdistrict 1 and Subdistrict 2 billings combined. Customer is listed in the Subdistrict where majority of consumption occurs.

2	20	1	0	

	201	0	PERCENTAGE OF
CONSUMPTION	AMOUNT		OPERATING
MCF (1)	BILLED	RANK	REVENUE
65,732.5	\$ 2,729,983	1	1.6%
29,397.2	1,569,653	3	0.9%
42,469.7	1,719,977	2	1.0%
17,844.5	724,414	11	0.4%
28,946.6	1,146,287	5	0.7%
23,363.6	916,089	8	0.5%
15,064.0	560,643	12	0.3%
,	-	-	-
22,045.9	1,153,097	6	0.7%
2,564.0	103,201	20	0.1%
10,297.9	412,905	15	0.2%
10,271.7	412,703	-	0.270
		_	
_	_	_	_
-	-	-	-
19,007.9	765,050	10	0.5%
19,007.9	703,030		
10,613.4	440,882	- 14	0.3%
4,327.6	230,575	18	0.3%
6,207.5	256,028	17	0.2%
297,882.3	12,728,784		7.5%
9,451.8	412,679	16	0.2%
31,631.8	1,394,694	4	0.8%
19,319.9	854,683	9	0.5%
, -	-	-	-
12,585.8	542,106	13	0.3%
25,468.4	1,126,977	7	0.7%
,	-,,	- -	-
_	_	_	-
_	_	_	-
4,792.4	205,482	19	0.1%
103,250.1	4,536,621		2.6%
401,132.4	\$ 17,265,405		10.1%

NORTHEAST OHIO REGIONAL SEWER DISTRICT RATIO OF OUTSTANDING DEBT BY TYPE LAST TEN YEARS

Debt by Type, In Thousands		2019	_	2018		2017		2016
Revenue Bond Issues								
\$68,280 Series 2005 (A)	\$	-		\$ -	\$	-	\$	-
\$126,055 Series 2007 (B) (F) (G)		-		-		-		7,520
\$336,930 Series 2010 (C)		85,210		336,930		336,930		336,930
\$249,535 Series 2013 (D) (H)		24,730		24,730		24,730		249,535
\$350,570 Series 2014A (E)		329,585		332,585		336,570		350,570
\$68,460 Series 2014B (F)		62,285		65,440		68,460		68,460
\$25,015 Series 2016 (G)		21,790		21,955		22,115		25,015
\$241,595 Series 2017 (H)		241,040		241,595		241,595		-
\$245,005 Series 2019 (J)		245,005	_					
Total Revenue Bond Issues		1,009,645		1,023,235		1,030,400		1,038,030
Bond Premium		63,704		48,533		53,979		59,638
Bond Discount		(18)	_	(20)		(22)		(26)
Total Revenue Bonds		1,073,331		1,071,748		1,084,357		1,097,642
Water Pollution Control Loans		707,522	_	595,876		515,685		490,186
Total All Debt	\$	1,780,853	_	\$ 1,667,624	\$	1,600,042	\$	1,587,828
Number of Customer Accounts (1)		323,865		323,664		323,877		325,225
Outstanding Debt Per Customer Account	\$	5,499		\$ 5,152	\$	4,940	\$	4,882
(1)For this schedule, Number of Customer Accounts is adjusted for Master Meter Communities as follows.	k							
Historical Number of Customer Accounts		222.750		222 574 (1	`	222 500 (211 441
(see pages 96 & 97)		322,758 (1)	l)	322,574 (I)	322,799 (l)	311,441
Less Master Meter Communities		(1)		(1)		(1)		(3)
Add estimated number of customers in Master		1 100		1.001		1.070		12.707
Meter Communities		1,108	_	1,091		1,079		13,787
Number of Customer Accounts		323,865	_	323,664		323,877		325,225

^{*}The Master Meter Communities bill their customers separately.

Master Meter are Communities of Village of Richfield and Summit County.

Note: This schedule should be read in conjunction with Note 6 to the Audited Financial Statements for December 31, 2019.

- (A) The Series 1995 Bonds were refunded on December 20, 2005 and replaced by the Series 2005 Bonds.
- (B) The Series 2007 Bonds were issued on May 22, 2007.
- (C) The Series 2010 Bonds were issued on November 17, 2010.
- (D) The Series 2013 Bonds were issued on March 26, 2013.
- (E) The Series 2014A Bonds were issued on December 18, 2014.
- (F) The Series 2014B Bonds were issued on December 18, 2014 and refunded a portion of the Series 2007 Bonds.
- (G) The Series 2016 Bonds were issued on March 24, 2016 and refunded a portion of the Series 2007 Bonds.
- (H) The Series 2017 Bonds were issued on September 20, 2017 and refunded a portion of the Series 2013 Bonds.
- (I) Starting in 2017, Summit County is no longer billed as a Master Meter community, billing is based on actual consumption by property. Village of Richfield is still a Master Meter community.
- (J) The Series 2019 Bonds were issued on September 10, 2019 and refunded a portion of the Series 2010 Bonds.

2015	2014	2013	2012	2011	2010
\$ 13,950 34,110 336,930 249,535 350,570 68,460	\$ 20,445 36,865 336,930 249,535 350,570 68,460	\$ 26,635 112,430 336,930 249,535	\$ 32,525 114,930 336,930	\$ 38,190 117,330 336,930 - -	\$ 43,660 119,645 336,930 - -
-	-	-	-	-	-
1,053,555 66,503	1,062,805 74,014	725,530 2,299	484,385 2,646	492,450 3,046	500,235 3,507
_	_	_	_	_	_
1,120,058 497,778	1,136,819 469,536	727,829 468,816	487,031 470,471	495,496 478,272	503,742 435,356
\$ 1,617,836	\$ 1,606,355	\$ 1,196,645	\$ 957,502	\$ 973,768	\$ 939,098
326,496	326,555	326,720	326,412	323,567	315,794
\$ 4,955	\$ 4,919	\$ 3,663	\$ 2,933	\$ 3,009	\$ 2,974
312,837	313,021	313,284	313,294	309,820	302,838
(3)	(3)	(3)	(3)	(3)	(3)
13,662 326,496	13,537 326,555	13,439 326,720	13,121 326,412	13,750 323,567	12,959 315,794

NORTHEAST OHIO REGIONAL SEWER DISTRICT DEMOGRAPHIC AND ECONOMIC STATISTICS LAST TEN YEARS

	Estimated	Cuyahoga County					
	Population	Unemployment To		otal Personal	Pe	Per Capita	
Year	Served (1)	Rate (2)	Inco	ome (000's) (3)	Personal Income (
2010	1,278,226	9.5%	\$	51,092,441	\$	41,347	
2011	1,269,820	9.9%		54,151,587		44,088	
2012	1,265,798	7.0%		56,876,705		40,838	
2013	1,263,796	7.2%		56,730,102		47,294	
2014	1,260,610	5.3%		59,358,035		47,087	
2015	1,255,921	4.5%		60,919,487		48,506	
2016	1,249,352	5.4%		62,496,228		50,023	
2017	1,249,352	4.8%		65,900,676		52,783	
2018	1,243,857	5.0%		68,087,050		54,739	
2019	1,235,072	3.6%		n/a		n/a	

Note - Items indicated "n/a" were not available as of the date of this report.

⁽¹⁾ Sources are District administrative records, U.S. Census, and U.S. Census Block Data as presented in the Northeast Ohio Areawide Coordinating Agency Magic Database.

⁽²⁾ Sources are District administrative records, County of Cuyahoga, Ohio Comprehensive Annual Financial Report and U.S. Department of Labor/Bureau of Labor Statistics. Cuyahoga County is significantly the same as the District's service area.

⁽³⁾ U.S. Department of Commerce, Bureau of Economic Analysis. Cuyahoga County is significantly the same as the District's service area.

NORTHEAST OHIO REGIONAL SEWER DISTRICT
Principal Employers of Cuyahoga County, Ohio
As of December 31, 2019 and 2010

		2019			2010	
	Number of		Percentage	Number of		Percentage
	Employees (1)		of Total	Employees (1)		of Total
	FTE*		County	FTE*		County
Employer Name (1)	6-30-2019	Rank (1)	Employment (2)	12-31-2010	Rank (1)	Employment (2)
Cleveland Clinic Health System	33,326		5.67%	34,000	_	5.04%
University Hospitals	17,711	2	3.01%	13,224	3	1.96%
U.S. Office of Personnel Management	12,125	3	2.06%	14,843	2	2.20%
Progressive Corp.	9,554	4	1.63%	8,900	5	1.32%
Group Management Services Inc.	7,641	5	1.30%	- (3)	ı	
Cuyahoga County	7,414	9	1.26%	8,036	9	1.19%
City of Cleveland	6,828	7	1.16%	7,580	6	1.12%
The MetroHealth System	6,538	~	1.11%	- (3)		0.00%
Cleveland Municipal School District	6,517	6	1.11%	7,385	10	1.09%
KeyCorp	4,959	10	0.84%	- (3)	1	
State of Ohio	ı	ı		9,932	4	1.47%
Summa Health System		1		8,000	7	1.19%
United States Postal Service	1	ı	1	7,641	~	1.13%
T. c. c. T.	113 613		10.150/	110 541		7017
10ta1	112,013		19.1370	117,241		17.7170
Total Cuyahoga County Employment (2)			587,552			675,000

^{*} Full-Time Equivalent.

⁽¹⁾ Sources are Crain's Cleveland Business, December 2019 and December 2010.

Cuyahoga County is significantly the same as the District's service area.

⁽²⁾ Sources of total employment for Cuyahoga County, Ohio are District administrative records, Cuyahoga County, Ohio Comprehensive Annual Financial Report, and U.S.

Department of Labor, Bureau of Labor Statistics.

⁽³⁾ Employment outside of top ten in reporting year.

NORTHEAST OHIO REGIONAL SEWER DISTRICT MISCELLANEOUS OPERATING STATISTICS LAST TEN YEARS

	2019	2018	2017	2016
TREATMENT PLANT FLOW				
Billions of gallons of sewage				
treated per plant:				
Easterly	32.3	34.2	29.9	26.3
Southerly	45.5	48.3	44.8	41.0
Westerly	9.3	9.8	8.6	9.0
Total	87.1	92.3	83.3	76.3
Total sewage treated, in MCFs (1)	11,640,856	12,339,572	11,136,364	10,200,535
MCFs billed, total District (5) (10)	3,511,140	3,569,084	3,757,322	3,703,466
STAFFING LEVELS				
Number of sewer employees:				
Plant Operations and Maintenance (4)	411	432	424	427
Engineering	47	63	64	66
Finance (6) (7)	46	45	43	43
Human Resources (3)	21	29	30	30
Information Technology	33	35	36	24
District Administration (3) (6) (8)	37	17	14	15
Legal (8)	10	11	10	10
Administration and External Affairs (7)	38	38	41	33
Watershed Programs (4)	82	82	105	94
Total	725	752	767	742
Number of stormwater employees:				
Stormwater (9)	39	36	26	8
Total District employees	764	788	793	750
Budgeted employees, total District	820	824	809	773

Source: Various District records.

⁽¹⁾ Conversion factor: 1 MCF (thousand cubic feet) = 7,480 gallons.

⁽³⁾ Safety and Security reclassified from Human Resources to District Administration beginning in 2005.

⁽⁴⁾ Watershed Programs reclassified from Plant Operations and Maintenance to Watershed Programs.

⁽⁵⁾ Restated 2010 MCF's billed.

⁽⁶⁾ Reclassified Internal Audit from Finance to District Administration in 2009.

⁽⁷⁾ Reclassified Customer Service from Finance to Administration and External Affairs in 2011.

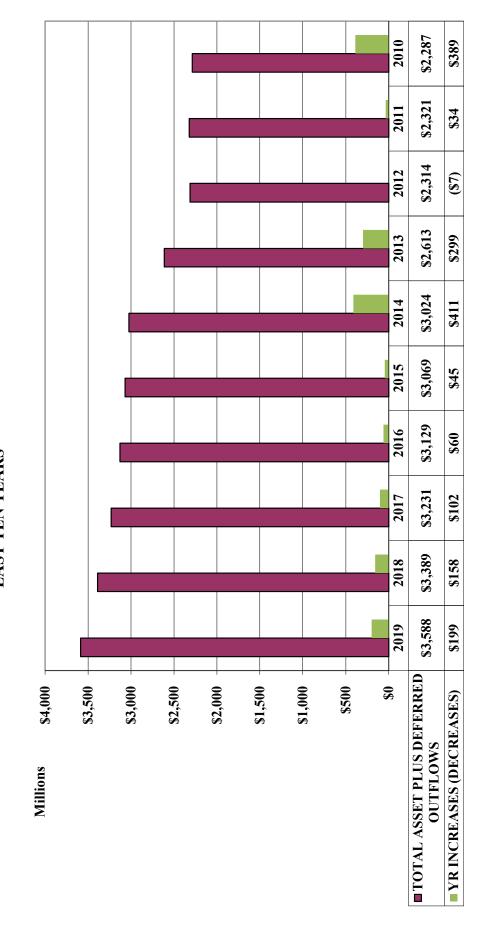
⁽⁸⁾ Reclassified Records Management from Legal to District Administration in 2011.

⁽⁹⁾ The stormwater program began in 2016.

⁽¹⁰⁾ In 2017, a one-time 1.5% increase in total MCFs was due to the conversion of quarterly to monthly billing cycle.

2015	2014	2013	2012	2011	2010
29.4	32.2	31.7	32.9	41.9	30.9
47.7	47.2	44.0	39.1	51.5	39.2
9.7	10.3	9.9	9.9	12.6	9.0
86.8	89.7	85.6	81.9	106.0	79.1
11,604,278	11,991,979	11,443,850	10,949,198	14,171,123	10,574,866
3,665,500	3,739,178	3,709,188	3,895,816	4,096,885	4,195,507
410	363	344	339	352	357
64	61	61	61	52	54
43	44	43	39	41	47
27	16	16	15	17	17
19	22	18	19	19	20
13	78	69	66	54	50
8	9	12	11	10	14
27	38	32	28	25	18
83	77	78	70	72	63
694	708	673	648	642	640
-				<u></u>	
694	708	673	648	642	640
761	720	710	602	690	670
761	730	719	693	680	679

NORTHEAST OHIO REGIONAL SEWER DISTRICT CUMULATIVE ASSET GROWTH LAST TEN YEARS





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NORTHEAST OHIO REGIONAL SEWER DISTRICT CAPITAL ASSET STATISTICS LAST TEN YEARS

	2019	2018	2017	2016
Number of Buildings				
Operations				
Southerly Plant	45	45	45	44
Easterly Plant	22	22	21	21
Westerly Plant	17	17	17	17
Outlying Pump Buildings	9	9	7	6
Total Operations	93	93	90	88
Administration				
District Administration	1	1	1	1
Environmental Maintenance and Services Center	4	4	4	4
Total Offices	5	5	5	5
Total Buildings	98	98	95	93
Miles of Interceptor Sewers Installed Annually*	3.33	3.53	0	0.20
Number of Outlying Systems				
Sewage Collection System				
Interceptor Sewers and Tunnels	23	22	21	21
Inter-Community Relief Sewers	30	30	30	30
Automated Regulators	35	31	32	32
Pumping Stations	13	13	10	9
Force Mains	8	5	5	5
Total Sewage Collection System	109	101	98	97
Support Facilities				
Floatables Control Sites	10	10	10	10
Biofilter Odor Control Sites	8	8	8	8
Rain Gauge Sites	30	30	29	28
Lakeview Dam	1	1	1	1
Total Support Facilities	49	49	48	47
Total Outlying Systems	158	150	146	144
Acres of Land				
Operations				
Southerly Plant	311.2	311.2	311.2	311.2
Easterly Plant	92.6	92.6	92.6	92.6
Westerly Plant	13.4	13.4	13.4	13.4
Administration Administration				
District Administration	2.6	2.6	2.6	2.6
Environmental Maintenance and Services Center	14.7	14.7	14.7	14.7
Total Acres, Operations and Administration	434.5	434.5	434.5	434.5
* * * * * * * * * * * * * * * * * * * *				

^{*}Total interceptor sewers are in excess of 200 miles.

Source: District accounting and engineering records.

2015	2014	2013	2012	2011	2010
43	42	42	40	39	39
20	19	19	18	18	18
17	17	16	16	16	16
6	7	7	7	7	7
86	85	84	81	80	80
		4			
1	1	1	1	1	1
4	4	4	4	4	4
5	5	5	5	5	5
91	90	89	86	85	85
1.4	4.5	0.25	2.87	5.55	3.95
21	21	21	21	21	21
30	30	29	28	26	26
32	31	25	25	25	25
9	9	10	10	10	10
5	5	6	6	6	6
97	96	91	90	88	88
10	10	10	10	10	10
8	8	8	8	8	8
28	28	25	25	25	25
1	1	1	1	1	1
47	47	44	44	44	44
144	143	135	134	132	132
311.2	311.2	311.2	311.2	311.2	311.2
92.6	92.6	92.6	92.6	92.6	92.6
13.4	13.4	13.4	13.4	13.4	13.4
2.6	26	2.6	2.6	2.6	2.6
2.6	2.6	2.6	2.6	2.6	2.6
14.7	14.7	14.7	14.7	14.7	14.7
434.5	434.5	434.5	434.5	434.5	434.5



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NORTHEAST OHIO REGIONAL SEWER DISTRICT HISTORICAL NUMBER OF CUSTOMER ACCOUNTS LAST TEN YEARS

	2019	2018	2017	2016
Sewage Accounts:				
Subdistrict 1				
Cleveland (2)	118,958	119,325	120,031	122,204
Subdistrict 2				
Master Meter - Suburbs (1) (2) Direct Service - Suburbs (2)	1 203,799	1 203,248	1 202,767	3 189,234
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
Subtotal	203,800	203,249	202,768	189,237
Total Sewage Accounts	322,758	322,574	322,799	311,441
Stormwater Only Accounts (3)	17,259	17,268	17,296	20,602
Total Customers	340,017	339,842	340,095	332,043

- (1) Master Meter communities are Village of Richfield and Summit County. Commencing January 2008, the City of East Cleveland became a direct service community billed by the City of Cleveland in Subdistrict 2. Effective beginning of 2017, the District is no longer billing Summit County as a Master Meter community; billing is based on actual consumption by property. Village of Richfield is still a Master Meter community.
- (2) Represents total accounts billed for sewage, stormwater fees, and wellwater.
- (3) This represents the remainder of North Royalton that the District does not provide sewage services, Summit County customers where sewage fees were billed at Master Meters, and actual stormwater only accounts, such as parking lots and other properties that do not have water/sewage services.

2015	2014	2013	2012	2011	2010
123,722	124,288	125,422	126,357	125,832	121,009
123,722	124,200	123,422	120,337	123,632	121,009
2	2	2	2		2
3	3	3	3	3	3
189,112	188,730	187,859	186,934	183,985	181,826
189,115	188,733	187,862	186,937	183,988	181,829
312,837	313,021	313,284	313,294	309,820	302,838
312,837	313,021	313,284	313,294	309,820	302,838
312,037	313,021	313,201	313,27 1	307,020	302,030

NORTHEAST OHIO REGIONAL SEWER DISTRICT ANNUAL METERED BILLING QUANTITIES LAST TEN YEARS (IN THOUSANDS OF CUBIC FEET)

	2019	2018	2017 (3)	2016
Subdistrict 1 Cleveland	1,575,484	1,622,406	1,701,704	1,684,932
Subdistrict 2 Direct Service - Suburbs (2)	1,926,313	1,936,856	2,046,806	1,921,167
Master Meter - Suburbs (1)	9,240	9,822	8,812	97,367
Subtotal	1,935,553	1,946,678	2,055,618	2,018,534
Total Service Area	3,511,037	3,569,084	3,757,322	3,703,466

- (1) For years 2010-2011, Consumption of Master Meter Suburbs is presented at 80% of their total consumption, which is the billing basis. For years 2012-2015, Consumption of Master Meter Suburbs is presented at 70%, 65%, 60% and 55%; respectively, of their total consumption, which is the billing basis.

 Starting in 2017, Summit County is no longer billed as a Master Meter community; the billing is based on actual consumption by property. Village of Richfield is still a Master Meter community.
- (2) Restated 2010 for consumption adjustment.
- (3) In 2017, a one-time 1.5% increase in total MCFs was due to the conversion of quarterly to monthly billing cycle.

2015	2014	2013	2012	2011	2010
1,668,505	1,715,359	1,706,438	1,781,276	1,881,996	1,946,380 (2)
1,884,506	1,892,128	1,859,247	1,977,996	2,005,569	2,078,834 (2)
112,489	131,691	143,503	136,544	209,320	170,293
1,996,995	2,023,819	2,002,750	2,114,540	2,214,889	2,249,127
3,665,500	3,739,178	3,709,188	3,895,816	4,096,885	4,195,507

NORTHEAST OHIO REGIONAL SEWER DISTRICT SUMMARY OF SEWER REVENUES, EXPENSES, DEBT SERVICE AND DEBT SERVICE COVERAGE LAST TEN YEARS

(In Thousands of Dollars)

	 2019	-	2018	 2017 (3)	2	2016 (3)
Sewer Operating Revenues, Net Non-Operating Sewer Revenues	\$ 340,213 8,449	\$	326,059 5,138	\$ 299,380 3,315	\$	286,783 3,397
Total Revenues Sewer Operating Expenses (Exclusive of depreciation)	348,662 138,348		331,197 132,981	302,695 131,755		290,180 118,992
Transfer to Rate Stabilization Account Total Expenses	 138,348		136,955	 131,755		118,992
Net Revenues Available for Debt Service	\$ 210,314	\$	194,242	\$ 170,940	\$	171,188
Total Revenue Bond Debt Service (1), (2)	\$ 44,679	\$	51,163	\$ 62,907	\$	63,428
Coverage on Revenue Bond Debt Service	4.71		3.80	2.72		2.70
Total All Debt Service (1)	\$ 94,420	\$	95,770	\$ 107,612	\$	111,612
Coverage on Total Debt Service	2.23		2.03	1.59		1.53

⁽¹⁾ Net Revenues are first used to pay debt service on Revenue Bonds and second to pay debt service on loans from the Ohio Water Development Authority (OWDA) and Water Pollution Control Loan Fund (WPCLF). The annual Debt Service Requirements on these obligations for the ten years ended December 31, 2019 were:

	2019	2018	2017	2016
Revenue Bond Issues and Debt Service	<u>.</u>			
\$68,280 Series 2005 (A)	\$ -	\$ -	\$ -	\$ 14,648
\$126,055 Series 2007 (B) (F) (H)	-	-	338	3,373
\$336,930 Series 2010 (C) (G)	6,755	13,335	13,360	13,367
\$249,535 Series 2013 (D) (I)	952	952	12,172	12,172
\$350,570 Series 2014A (E)	18,301	19,485	30,182	16,182
\$68,460 Series 2014B (F)	6,209	6,225	3,205	3,205
\$25,015 Series 2016 (H)	824	823	3,650	481
\$241,595 Series 2017 (I)	10,201	10,343	-	-
\$245,005 Series 2019 (J)	1,437	-	-	-
Total Revenue Bond Issues and Debt Service	44,679	51,163	62,907	63,428
WPCLF Debt Service	 49,741	 44,607	44,705	 48,184
Total All Debt Service	\$ 94,420	\$ 95,770	\$ 107,612	\$ 111,612

- (A) The Series 1995 Bonds were refunded on December 20, 2005 and replaced by the Series 2005 Bonds.
- (B) The Series 2007 Bonds were issued on May 22, 2007.
- (C) The Series 2010 Bonds were issued on November 17, 2010.
- (D) The Series 2013 Bonds were issued on March 26, 2013.
- (E) The Series 2014A Bonds were issued on December 18, 2014.
- (F) The Series 2014B Bonds were issued on December 18, 2014 and refunded a portion of the Series 2007 Bonds.
- (G) The Series 2010 Bonds interest has increased due to the BAB subsidy reduction from the recent sequester by Congress.
- (H) The Series 2016 Bonds were issued on March 24, 2016 and refunded a portion of the Series 2007 Bonds.
- (I) The Series 2017 Bonds were issued on September 20, 2017 and refunded a portion of the Series 2013 Bonds.
- (J) The Series 2019 Bonds were issued on September 10, 2019 and refunded a portion of the Series 2010 Bonds.
- (2) Bonds and loans are secured by a pledge of and lien on revenues of the District, after payment of operating and maintenance costs, and on monies and investments comprising the Construction Funds and Revenue Bond Debt Service Deposit. Loans are subordinate to the Bonds.
- (3) Per bond covenants, sewer revenues and expenses are only used to calculate debt service ratios.

 2015 (3)	 2014	 2013	 2012		2011	 2010
\$ 259,683 1,353	\$ 239,185 1,290	\$ 209,790 1,462	\$ 187,241 1,939	\$	172,722 3,674	\$ 166,851 4,131
261,036	240,475	211,252	189,180		176,396	170,982
104,480	102,198	99,895	94,107		90,314	97,278
6,000	6,000	-	-		3,000	-
110,480	108,198	99,895	94,107		93,314	97,278
\$ 150,556	\$ 132,277	\$ 111,357	\$ 95,073	\$	83,082	\$ 73,704
\$ 42,425	\$ 28,774	\$ 28,579	\$ 15,372	\$	15,370	\$ 15,375
3.55	4.60	3.90	6.18		5.41	4.79
\$ 94,104	\$ 78,180	\$ 78,818	\$ 64,473	\$	59,974	\$ 60,821
1.60	1.69	1.41	1.47		1.39	1.21
2015	2014	2013	2012		2011	2010
\$ 7,517	\$ 7,522	\$ 7,516	\$ 7,518	\$	7,514	\$ 7,520
4,457	7,858	7,858	7,854		7,856	7,855
13,363	13,394	13,205	-		-	-
6,086	-	-	-		-	-
8,091 2,911	-	-	-		-	-
2,911	-	-	-		-	-
_	-	_	_		-	-
_	_	_	_		_	_
 42,425	 28,774	 28,579	 15,372	-	15,370	 15,375
51,678	49,406	50,239	49,101		44,604	45,446
\$ 94,104	\$ 78,180	\$ 78,818	\$ 64,473	\$	59,974	\$ 60,821

NORTHEAST OHIO REGIONAL SEWER DISTRICT SEWAGE SERVICE RATES RATE HISTORY - LAST TEN YEARS

Fiscal Years	Standard	Homestead		SUBDISTRICT	TRICT 1			SUBDISTI	FRICT 2	
During Which	Fixed	Fixed	Star	Standard	Homes	Homestead (2)	Star	Standard	Homes	Homestead (2)
Rates Were Effective	Fee (3)	Fee (4)	Rate (1)	% Change	Rate (1)	% Change	Rate (1)	% Change	Rate (1)	% Change
2010	ı ⊗	∨	\$ 40.75	9.7	\$ 27.35	9.6	\$ 44.25	8.2	\$ 29.70	8.2
2011	1	1	44.75	8.6	30.05	6.6	48.00	8.5	32.25	8.6
2012	5.85	1	49.55	10.7	29.75	-1.0	52.55	9.5	31.75	-1.6
2013	6.30	1	55.45	11.9	33.35	12.1	58.15	10.7	35.15	10.7
2014	09.9	1	62.15	12.1	37.35	12.0	64.55	11.0	38.95	10.8
2015	06.9	1	69.65	12.1	41.85	12.0	71.75	11.2	43.25	11.0
2016	7.20	1	78.05	12.1	46.85	11.9	79.85	11.3	48.05	11.1
2017 (5)	10.80	6.45	83.10	6.5	49.85	6.4	84.60	5.9	50.85	5.8
2018 (5)	14.85	8.85	88.40	6.4	53.05	6.4	89.60	5.9	53.85	5.9
2019 (5)	19.05	11.40	94.15	6.5	56.50	6.5	95.05	6.1	57.10	0.9

(1) Per thousand cubic feet (MCF) of water consumed.

(2) These rates were first established in the 1991 fiscal year.

(3) A Fixed Fee per quarterly bill was established in the 2012 fiscal year.

(4) Starting 2017 fiscal year, a homestead fixed rate was established.

(5) Starting 2017 fiscal year, billing changed from quarterly to monthly billing. The fixed fee is calculated at a quarterly rate for comparison to prior years.

Industrial Waste Surcharge

An additional charge is billed to industrial and other types of customers discharging wastewater which contains substances

requiring more extensive treatment than effluent from residential customers.

The amount of this Industrial Waste Surcharge is calculated in accordance with formulas set forth in the Rate Resolution which take into account concentrations of suspended solids, biological oxygen demand and chemical oxygen demand based on waste oading determined by analysis or otherwise.

Minimum Quarterly Billing

applicable to the metered water usage of 1,000 cubic feet (7,480 gallons). Minimum Quarterly Billing was discontinued starting in 2012. Each customer of the District is charged a minimum quarterly amount for sewage service equal to the class of service rate

NORTHEAST OHIO REGIONAL SEWER DISTRICT STORMWATER FEE RATES RATES AS OF DECEMBER 31, 2019

Type of property Residential	<u>Tier Type</u> Tier 1	Impervious surface area (sq. ft.)* Less than 2,000	<u>2019 (1)</u> \$3.09	\$3.09	\$3.09	\$3.09
	Tier 2/Base	2,000-3,999	\$5.15	\$5.15	\$5.15	\$5.15
	Tier 3	4,000 or more	\$9.27	\$9.27	\$9.27	\$9.27
	Homestead/Affordability	Any size	\$2.07	\$2.07	\$2.07	\$2.07
Non-residential	All	Per ERU, or 3,000 square feet	\$5.15	\$5.15	\$5.15	\$5.15
	Educational Economically Disadvantaged (2)	Per ERU, or 3,000 square feet	\$2.07	\$2.07	\$2.07	\$2.07

All fees above are per month.

^{*} Impervious surface area (estimated) includes hard surfaces on your property such as rooftops, driveways, or decks/patios which contribute to increasing stormwater runoff.

⁽¹⁾ The fee is based on Equivalent Residential Units or ERU which equals 3,000 square feet of impervious area.

or school systems under the control of a common entity that are recognized in the State of Ohio and can demonstrate that Stormwater Fee may be available to all public and private primary, elementary, and secondary schools, school districts, (2) Educational Economically Disadvantaged Stormwater Fee - The Educational Economically Disadvantaged at least twenty-five (25) percent of their current students are eligible to participate in the Free Lunch Program under the Richard B. Russell National School Lunch Act (42 U.S.C.§ 1751, et seq.).

NORTHEAST OHIO REGIONAL SEWER DISTRICT CAPITAL IMPROVEMENT PROGRAM

USES AND SOURCES OF FUNDS

FOR THE YEARS ENDING DECEMBER 31, 2020 THROUGH 2029 (In Thousands of Dollars)

2022 2020 2021 2023 2024 **USES OF FUNDS** Sewage Treatment Plant Improvements 9,302,000 4,438,000 10,147,000 3,278,000 \$ Westerly \$ 3,177,000 Southerly 36,674,000 28,343,000 34,773,000 26,189,000 29,153,000 Easterly 10,463,000 16,738,000 5,470,000 16,149,000 4,085,000 Sub-Total 56,439,000 55,949,000 41,806,000 48,580,000 35,605,000 Interceptors/Rehabilitation 8,995,000 16,601,000 17,518,000 26,341,000 27,225,000 Combined Sewer Overflow Control Program 162,247,000 127,197,000 188,690,000 179,083,000 159,080,000 Districtwide Building Improvments and Other Improvements \$23,648,000 20,345,000 \$14,274,000 \$7,749,000 \$9,564,000 Information Technology and Other Minor Equipment 16,439,000 14,780,000 15,536,000 16,340,000 17,196,000 267,768,000 235,789,000 276,907,000 278,093,000 248,670,000 Total **SOURCES OF FUNDS** 182,611,000 WPCLF Loans (1) 153,381,000 133,573,000 184,783,000 163,154,000 Internally Generated Funds/Reserves 114,387,000 102,216,000 92,122,000 95,483,000 85,515,000 Total 267,768,000 235,789,000 276,905,000 278,094,000 248,669,000

⁽¹⁾ Subject to appropriation and allocation and can not be expected with any degree of certainty.

2025	2026	2027	2028	2029	TOTAL
\$ 3,263,000	\$ 3,361,000	\$ 3,462,000	\$ 3,576,000	\$ 3,673,000	\$ 47,677,000
12,249,000	7,672,000	18,383,000	13,401,000	22,517,000	229,354,000
2,212,000	2,062,000	2,054,000	2,121,000	2,179,000	63,533,000
17,724,000	13,095,000	23,899,000	19,098,000	28,369,000	340,564,000
6,893,000	7,096,000	11,729,000	22,727,000	7,753,000	152,878,000
217,171,000	179,763,000	129,880,000	161,753,000	129,320,000	1,634,184,000
\$16,667,000	\$6,196,000	\$7,645,000	\$9,307,000	\$17,878,000	133,273,000
18,109,000	19,082,000	20,122,000	21,233,000	22,422,000	181,259,000
\$ 276,564,000	\$ 225,232,000	\$ 193,275,000	\$ 234,118,000	\$ 205,742,000	\$ 2,442,158,000
\$ 191,187,000	\$ 148,039,000	\$ 114,845,000	\$ 153,557,000	\$ 122,087,000	\$ 1,547,217,000
85,375,000	77,196,000	78,431,000	80,562,000	83,654,000	894,941,000
\$ 276,562,000	\$ 225,235,000	\$ 193,276,000	\$ 234,119,000	\$ 205,741,000	\$ 2,442,158,000

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Prepared by the Department of Finance

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