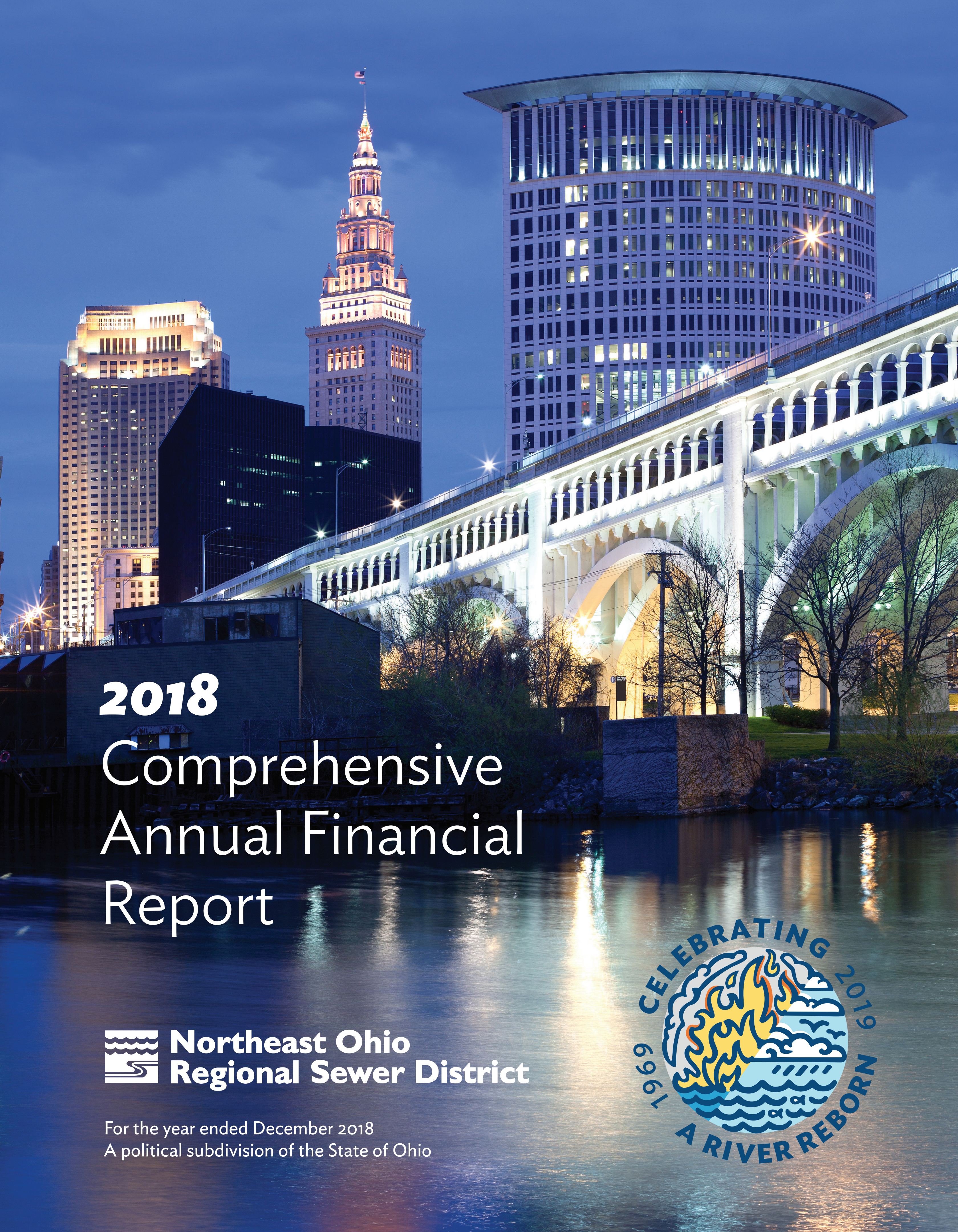


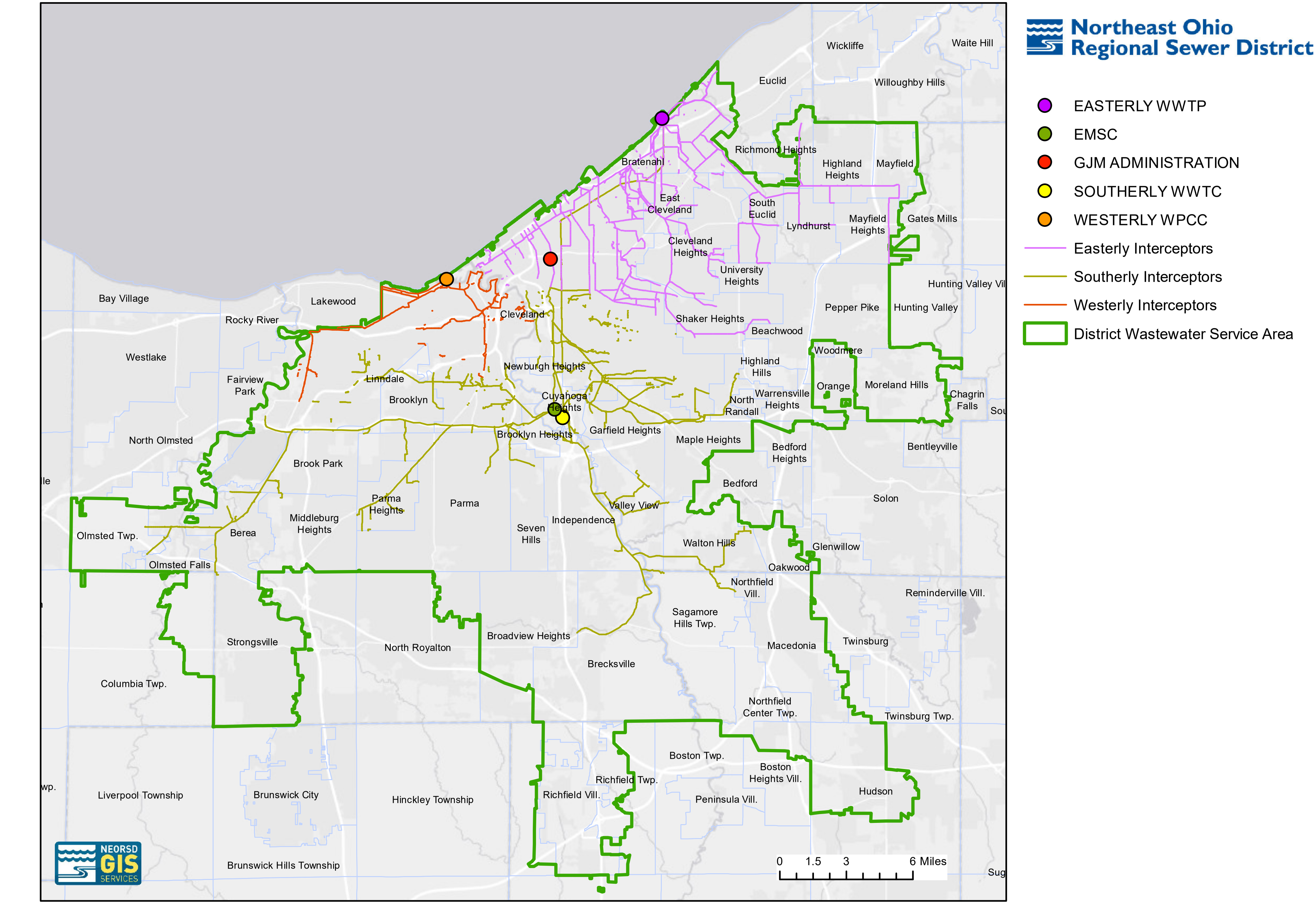
2018 Comprehensive Annual Financial Report

Northeast Ohio Regional Sewer District

For the year ended December 2018
A political subdivision of the State of Ohio

CELEBRATING 2019 · 1969 · A RIVER REBORN

NEORSD Wastewater Service Area Map



Northeast Ohio Regional Sewer District

A Political Subdivision of the State of Ohio

2018 Comprehensive Annual Financial Report
For the Year Ended December 31, 2018

Prepared by the Department of Finance

Kenneth J. Duplay, CPA, CMA
Chief Financial Officer

Northeast Ohio
Regional Sewer District

3900 Euclid Avenue
Cleveland, Ohio 44115
(216) 881-6600 • neorsd.org

NORTHEAST OHIO REGIONAL SEWER DISTRICT

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 2018

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FOR THE YEAR ENDED DECEMBER 31, 2018

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Introductory section

Northeast Ohio Regional Sewer District

July 1, 2019

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 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 year ended December 31, 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, management of the District has established a comprehensive internal control framework that is designed both 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 United States of America. Because the cost of internal controls should not outweigh their benefits, the District's comprehensive framework of internal controls has been 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 year ended December 31, 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 year ended December 31, 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 350 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 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, who 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 66 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 specific 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. Although the economy is still recovering, 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 2018 (per the Bureau of Labor Statistics not seasonally adjusted) for Cuyahoga County, which is significantly the same as the District's service area, was 5.0%. Cuyahoga County's unemployment rate was 0.3% higher than the unemployment rate for the State of Ohio (4.8%) and 1.4% higher than the national rate of 3.7%. 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 20 years, of approximately $2.7 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 $1.4 billion in capital project expenditures from 2019 to 2023, primarily for improvements to our Southerly Wastewater Treatment Plant and our CSO long-term control plan. This includes approximately $134.5 million for the plants, $986.4 million for the CSO projects, $115.5 million for the collection system and building improvements and $184.6 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.

Debt Administration

At year-end, the District had bonded debt outstanding of $1,023,235,000. The debt, including applicable bond premium costs and discounts, is $1,071,768,094. The District has also obtained loans through the State of Ohio Water Pollution Control Loan Fund (WPCLF). As of December 31, 2018, the outstanding loan balance was $595,876,147 for the WPCLF. Outstanding revenue bonds of the District are rated AA+ by Standard & Poor's and Aa1 by Moody's rating agencies. Note 7 to the financial statements include 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 7 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 7 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 7 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 7 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 7 to the financial statements.

MAJOR INITIATIVES

For the Year

2018 Awards

During 2018, the District received awards for 2017 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 2017.

The Westerly plant earned Peak Performance Silver awards that recognize facilities with no more than five violations per calendar year. The Easterly and Southerly plants earned Peak Performance Gold awards that recognize facilities with no permit violations for the entire calendar year. Awards for 2018 performance have not been announced as of the date of this report.

During 2018, the Government Finance Officers Association of the United States and Canada (GFOA) presented the Distinguished Budget Presentation Award to the District for the twelfth time for its 2018 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 $57.5 million worth of business to MBE/WBE/SBE on construction, engineering and stormwater projects in 2018. The total number of certified firms in 2018 was 369. 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 5,678 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 and satisfying environment where our most valuable resource – our workforce – flourishes. In an effort to be nationally recognized for implementing HR strategies that promote the District as an Employer of Choice, we must deploy top-notch programs that:

- Enhance workforce effectiveness and proactively anticipate changing needs
- Enhance HR service delivery
- Maintain legal and organizational compliance
- Attract top talent through proactive and innovative recruitment strategies
- Embrace diversity and encourage inclusion

2018 program highlights/successes are as follows:

Enhance workforce effectiveness and proactively anticipate changing needs

- Enhanced workforce planning by implementing managerial/technical career paths within the Engineering & Construction Department.
- The District's application for recognition by the Ohio State Apprentice Council (OSAC) for the Maintenance Training Program was approved.
- 52 District employees participated in Tuition Assistance Program (TAP) totaling $240,207.
- First FLUSH (Familiarize Leaders Upon Starting Here) Leadership Training concluded and launched cohorts.
- LEAD (Leadership Excellence & Development) Leadership Training (for employees moving from peers to supervisors) concluded and launched cohorts.
- 12 employees graduated from the Maintenance Training Program.
- 29 Trainees are at various stages of the 4 hr. Wastewater Plant Operator in Training Program.
- Successfully launched pilot of Mentoring Program in Operations and Maintenance (O&M).
- O&M Job Specific Training completed

Enhance HR service delivery

- The District implemented a fully integrated Human Resources Management System (HRMS) to include HR, Payroll, and Timekeeping in one system (UltiPro).
- The District also implemented UltiPro's Learning Management System which included Data Configuration, User Adoption Testing, Training Plan Development and Pilot Training.
- We continually seek external validation of our compensation practices to confirm our wage competitiveness. It was confirmed in 2018 that our practices align with the job market.

Maintain legal and organizational compliance

- District-wide ethics training was launched for the second year in a row to educate the workforce and maintain a positive and productive working environment.
- Three collective bargaining agreements were successfully negotiated. Two out of three were executed in 2019 (OPBA and IUOE Local 18-S, with AFSCME 2798 pending as of the date of this report).
- Substance Abuse Training required by 2798 and 18S collective bargaining agreements

Attract top talent through proactive and innovative recruitment strategies

- Launched employer branding strategy.
- One hundred and eighty (180) positions filled through the hiring and selection process, from thirty-five (35) different sources with an average time-to-fill of forty-five (45) days in 2018.
- Attended 25 career fairs and info sessions with local or national professional organizations and educational institutions.

Embrace diversity and encourage inclusion

- The District's Diversity and Inclusion (D&I) Team continued to address the initiatives as set forth in the Diversity Strategic Plan – initiatives with both an internal and external focus.
  - Externally, the Business Opportunity Program (BOP) provides procurement opportunities to minority-owned, women-owned and small business enterprises.
  - Internally, the District:
    - Refreshed the Vision, Mission, Goals and Key Performance Indicators of the D&I Program
    - Implemented 2018 D&I Action Items including:
      - Executive Thought Leadership Series (Incorporating D&I into Daily Work)
      - Monthly D&I segment in Senior Staff Meetings
      - Launched the Innovation Management Program.
      - Workforce Training
      - Established the D&I Council comprised of Senior Staff and Employee Resource Group (ERG) Leadership.
    - 8 active ERGs hosted over 30 events, meetings and lunch-&-learns
    - Produced first ERG Handbook.

Awards, Recognition and External Participation

Awards, recognition and external participation cultivate a culture of appreciation. The District's internal program awarded 26 employees and 28 teams for their contributions. In addition, 2 employee received Annual Spirit Awards for consistently demonstrating professionalism and promoting a positive workplace environment. External awards, recognition and external participation for 2018 include:

- Awards and Recognition
  - Commission on Economic Inclusion – Best in Class for Workforce Diversity
  - Who's Who in Black Cleveland (2 employees)
  - YWCA Woman of Professional Excellence (1 employee)
- External Participation
  - Hispanic Alliance Leadership Development Initiative – a program that addresses strengths and weaknesses in Latino leadership through authentic discussions skills sets, and how to maximizes relationships with organizations across the diverse Northeast Ohio community (1 employee)

CSO Long-Term Control Plan

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, required 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 2018, the District commenced full operation of the Euclid Creek Tunnel and associated pump station. This tunnel along with the Dugway Storage Tunnel, the second large-scale tunnel, will have the capacity to store 117 million gallons of combined sewage for treatment at the District's Easterly Wastewater Treatment Plant controlling approximately 1 billion gallons of CSO in a typical year. The construction of the Dugway Storage Tunnel is scheduled to be complete in the Fall of 2019. In 2018, the District also commenced 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 300 million gallons of CSO in a typical year. Additionally, the District continued to advance the construction of the third large-scale tunnel, the Doan Valley Tunnel, and commenced the design of the fifth large-scale tunnel, the Shoreline Storage Tunnel in 2018. 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.

Another major project the District completed under its Consent Decree outside of the storage tunnels includes the expansion of the Easterly WWTP secondary treatment capacity to provide full treatment to an additional 700 million gallons of wet weather flow in a typical year. The construction of the expansion was completed in 2017 and the system became fully operational in early 2018. Additionally, the preliminary design of upgrades to the existing Westerly CSO Treatment Facility (CSOTF) with chemically enhanced high rate treatment and disinfection (CEHRT) for further treatment of CSO 002, the third largest of the District's CSOs, is complete.

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. Many of the projects are fully operational and the last three (3) projects are scheduled to complete construction in 2019.

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 sanitary sewage-related project. 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 $43 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).

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 Statement 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 Statement 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.

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 Statement 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.

Strategic and Operational Action Plan

In 2018, Chief Executive Officer Kyle Dreyfuss-Wells, along with the Senior Staff, updated and revised the District's Strategic Plan to chart the organization's direction for the next three years. The Strategic Plan covers 2019 through 2021.

Through a series of facilitated work sessions, the Senior Staff re-affirmed the District's mission, vision statement and core values. The Strategic 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.

The Strategic Plan provides a navigational guide for the District through 2021. The continually changing environment in which the District operates will require 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, 2017. This was the 23rd 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 Dreyfuss-Wells
Chief Executive Officer

Kenneth J. Duplay
Chief Financial Officer

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Northeast Ohio Regional Sewer District

2017 Comprehensive Annual Financial Reporting Award

Northeast Ohio Regional Sewer District

2018 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, 2018

Christopher P. Morrill

Executive Director

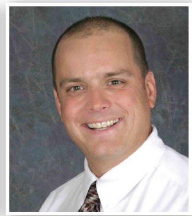
NORTHEAST OHIO REGIONAL SEWER DISTRICT
TABLE OF ORGANIZATION
DECEMBER 31, 2018

BOARD OF TRUSTEES


Darnell Brown
Board President


Ronald D. Sulik
Vice President


Mayor Timothy DeGeeter


Mayor Jack Bacci


Julius Ciaccia

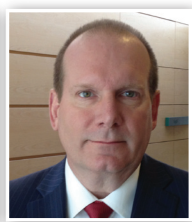

Sharon A. Dumas


Mayor Robert A. Stefanik

OFFICERS


Kyle Dreyfuss-Wells
Chief Executive Officer


Kenneth J. Duplay
Chief Financial Officer
85 employees


James Bunsey
Chief Operating Officer
513 employees


Eric Luckage
Chief Legal Officer
11 employees

DIRECTORS


Devona Marshall
Director of Engineering
64 employees


Angela Smith
Director of
Human Resources
30 employees


Francis P. Greenland
Director of
Watershed Programs
124 employees


Constance T. Haqq
Director of Administration
and External Affairs
38 employees


Mohan Kurup
Director of
Information Technology
38 employees


Francis G. Foley
Director of
Operations and Maintenance
449 employees


Financial
section

Ciuni & Panichi
CPAs and Business Advisors
Where Relationships Count.

Independent Auditor's Report

Board of Trustees
Northeast Ohio Regional Sewer District

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 year ended December 31, 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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, 2018, and the changes in its financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

Implementation of New Accounting Standard

As described in Note 3 to the basic financial statements, in 2018, the District adopted new accounting guidance, Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and as a result restated their December 31, 2017 net position of the business-type activities. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required schedules on pensions and 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 audit 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 audit was 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 audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the budgetary comparison information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Board of Trustees
Northeast Ohio Regional Sewer District

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated July 1, 2019, 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.

Ciuni & Panichi, Inc.

Cleveland, Ohio
July 1, 2019

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NORTHEAST OHIO REGIONAL SEWER DISTRICT
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 year ended December 31, 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 $1,529,566,349.
- Net position increased by $76,421,849.
- Net investment in capital assets increased by $89,900,459.
- Operating revenues increased by $26,143,198.
- Operating expenses increased by $11,479,733.

Overview of the Financial Statements

This discussion and analysis are intended to serve as an introduction to the District's basic financial statements. The District's basic financial statements are the statement of net position, the statement of revenues, expenses and changes in net position, the statement 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 statement of net position presents 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 statement of revenues, expenses and changes in net position presents 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 statement of cash flow provides information about the District's cash receipts and disbursements during the year. It summarizes 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 2018 and 2017, respectively. Certain amounts may vary slightly due to differences caused by rounding to thousands.

NORTHEAST OHIO REGIONAL SEWER DISTRICT
Management's Discussion and Analysis

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

	2018	Restated 2017	Change Amount	Change %
Assets				
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%
Deferred Outflows of Resources				
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%
Liabilities				
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	-	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%

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. For 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.

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 benefit

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.

As a result of implementing GASB 75, the District is reporting a net OPEB liability and deferred inflows/outflows of resources related to OPEB on the accrual basis of accounting. This implementation had the effect of restating net position at December 31, 2017 from $1,489,368,235 to $1,453,144,500.

The District's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,529,566,349 as of December 31, 2018, of which $1,196,966,572 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.

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 2018.

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

	2018	2017	Change Amount	Change %
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%

NORTHEAST OHIO REGIONAL SEWER DISTRICT
Management's Discussion and Analysis

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

	2018	2017	Change Amount	Change %
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	5	98	(93)	(94.9%)
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	70,667	66,443	4,224	6.4%
Total Expenses	306,573	290,870	15,703	5.4%
Change in Net Position	76,422	63,012	13,410	21.3%
Net Position at Beginning of Year - Restated (See Note 3)	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.

  - 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 2018, capital asset balances were as follows compared to 2017. Refer to Notes 2 and 6 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)

	2018	2017	Change Amount	Change %
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%

Capital Assets (continued)

		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, 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 7 to the audited financial statements for more detailed information on long-term debt.

Outstanding Debt at December 31,
(In Thousands)

		2018		2017
Revenue Bonds	$	1,071,748	$	1,084,356
Water Pollution Loans Payable		595,876		515,685
Total Debt	$	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, 2017, rates charged to customers increased approximately 8.3% for customers in the City of Cleveland and 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. 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.

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.

Northeast Ohio
Regional Sewer District

3900 Euclid Avenue
Cleveland, Ohio 44115
(216) 881-6600 • neorsd.org

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Statement of Net Position

December 31, 2018

Assets

	2018
Current Assets:	
Cash	$ 8,536,761
Stormwater Cash	25,820,540
Stormwater Community Cost-Share Cash	24,045,802
Short-Term Investments	266,657,736
Sewage Service Fees Receivable, Less Allowance for Doubtful Accounts of $23,600,000	112,397,409
Stormwater Service Fees Receivable, Less Allowance for Doubtful Accounts of $604,000	15,123,498
Receivables from Federal, State and Other Agencies	30,852,146
Inventory, Prepaid Expenses and Other	8,671,856
Total Current Assets	492,105,748
Noncurrent Assets:	
Capital Assets:	
Interceptor Sewer Lines	1,587,441,872
Buildings, Structures and Improvements and Equipment	1,157,328,957
Sewage Treatment and Other Equipment	644,560,640
Right to Use - Intangible	5,505,574
	3,394,837,043
Less: Accumulated Depreciation	(1,132,985,596)
	2,261,851,447
Land	28,859,749
Construction in Progress	544,006,768
Net Capital Assets	2,834,717,964
Long-Term Investments	9,996,486
Revenue Bond Debt Service Deposit - restricted	14,218,413
Net Pension Asset	931,953
Total Noncurrent Assets	2,859,864,816
Total Assets	3,351,970,564
Deferred Outflows of Resources:	
Pension	16,707,750
OPEB	4,898,449
Deferred Charge on Bond Refunding	15,654,149
Total Deferred Outflows of Resources	37,260,348
Total Assets and Deferred Outflows of Resources	$ 3,389,230,912

Continued

The accompanying notes are an integral part of the basic financial statements.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Statement of Net Position (Continued)

December 31, 2018

Liabilities and Net Position

		2018
Liabilities:		
Current Liabilities:		
Accounts Payable	$	16,372,681
Construction Contracts and Retainages Payable		38,084,936
Accrued Interest Payable		11,932,893
Other Accrued Liabilities		9,118,425
Current Maturities of Long-Term Debt		44,545,380
Total Current Liabilities		120,054,315
Noncurrent Liabilities:		
Long-Term Debt		1,623,078,574
Net Pension Liability		56,918,326
Net OPEB Liability		42,429,314
Other Accrued Long-Term Liabilities		200,000
Total Noncurrent Liabilities		1,722,626,214
Total Liabilities		1,842,680,529
Deferred Inflows of Resources:		
Pension		13,823,333
OPEB		3,160,701
Total Deferred Inflows of Resources		16,984,034
Net Position:		
Net Investment in Capital Assets		1,196,966,572
Restricted -Stormwater Community Cost-Share		24,045,802
Unrestricted		308,553,975
Total Net Position	$	1,529,566,349

The accompanying notes are an integral part of the basic financial statements.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Statement of Revenues, Expenses and Changes in Net Position

For the Year Ended December 31, 2018

	2018
Operating Revenues - Sewage:	
Billing Agents	$ 301,523,258
Direct Billed	23,142,825
Other	1,392,876
Total Operating Revenues - Sewage	326,058,959
Operating Revenues - Stormwater:	
Billing Agents	43,029,033
Direct Billed	935,644
Total Operating Revenues - Stormwater	43,964,677
Total District's Operating Revenues, Net	370,023,636
Operating Expenses - Sewage:	
Salaries and Wages	52,726,122
Fringe Benefits	31,535,641
Utilities	14,729,821
Professional and Contractual Services	32,255,207
Other	5,708,698
Depreciation	71,733,140
Total Operating Expenses - Sewage	208,688,629
Operating Expenses - Stormwater:	
Salaries and Wages	2,606,546
Fringe Benefits	382,135
Professional and Contractual Services	23,472,515
Other	756,779
Total Operating Expenses - Stormwater	27,217,975
Total District's Operating Expenses	235,906,604
Operating Income	134,117,032
Non-Operating Revenues (Expenses):	
Interest Revenue	5,573,074
Increase in Fair Value of Investments, Net	378,689
Non-Operating Grant Revenue	521,873
Non-Operating Grant Expenses	(4,534)
Green Infrastructure Program	(1,361,640)
Member Community Infrastructure Program	(4,911,520)
Stormwater Community Cost Share Disbursement	(4,218,308)
Loss on Disposals of Equipment	(385,744)
Interest Expense on Long-Term Debt	(59,784,224)
Federal Subsidy Revenue	6,497,151
Total Non-Operating Revenues (Expenses), Net	(57,695,183)
Change in Net Position	76,421,849
Net Position at Beginning of Year - Restated (See Note 3)	1,453,144,500
Net Position at End of Year	$ 1,529,566,349

The accompanying notes are an integral part of the basic financial statements.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Statement of Cash Flow

For the Year Ended December 31, 2018

	2018
Cash Flows from Operating Activities	
Cash Received From Customers	$ 356,660,451
Cash Payments to Suppliers for Goods and Services	(62,708,879)
Cash Payments to Employees for Services	(88,361,455)
Net Cash Provided by Operating Activities	205,590,117
Cash Flows From Investing Activities	
Purchases of Investments	(274,020,141)
Proceeds from Maturities of Investments	306,307,478
Interest on Investments	5,790,348
Net Cash Provided by Investing Activities	38,077,685
Cash Flows From Non-Capital Financing Activities	
Grant Payments	(4,534)
Grants Received	590,477
Member Community Infrastructure Program Expenditures	(3,152,387)
Green Infrastructure Program Expenditures	(591,172)
Net Cash Used by Non-Capital Financing Activities	(3,157,616)
Cash Flows From Capital and Related Financing Activities	
Principal Payments on Long-Term Debt	(42,096,453)
Interest Payments on Long-Term Debt	(58,279,568)
Proceeds from Water Pollution Control Loans	102,642,294
Proceeds on Sale of Capital Assets	59,879
Acquisition and Construction of Capital Assets	(225,369,580)
Net Cash Used by Capital and Related Financing Activities	(223,043,428)
Net Increase in Cash and Stormwater Cash	17,466,758
Cash at Beginning of Year	4,060,452
Stormwater Cash at Beginning of Year	19,690,139
Stormwater Community Cost-share Cash at Beginning of Year	17,185,754
Cash at End of Year	$ 58,403,103

Continued

The accompanying notes are an integral part of the basic financial statements.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Statement of Cash Flow (Continued)

For the Year Ended December 31, 2018

		2018
Reconciliation of Operating Income to Cash Provided By Operating Activities:		
Operating Income	$	134,117,032
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation		71,733,140
Allowance for Doubtful Accounts		(3,664,000)
Changes in Operating Assets and Liabilities:		
Accounts Receivable		(9,699,185)
Deferred Outflows of Resources - Pension		14,842,862
Deferred Inflows of Resources - Pension		13,155,098
Deferred Outflows of Resources - OPEB		(4,295,564)
Deferred Inflows of Resources - OPEB		3,160,701
Net Pension Asset		(607,040)
Net Pension Liability		(20,740,879)
Net Pension Liability - OPEB		5,602,694
Inventory and Prepaid Expenses		(757,138)
Accounts Payable and Other Accrued Liabilities		2,742,396
Total Adjustments		71,473,085
Net Cash Provided by Operating Activities	$	205,590,117

Supplemental Schedule of Non-Cash Investing, Capital and Relating Financing Activities

Long-Term Debt Increased for Receivables from State Agencies in Connection with Water Pollution Control Loans	$	12,660,454
Long-Term Debt Increased due to Accrued Construction Interest in Connection with Water Pollution Control Loans	$	2,324,738
Long-Term Debt Decreased due to Accrued Construction Principal Adjustment in Connection with Water Pollution Control Loans	$	(180,290)
Build America Bonds Subsidy Adjustment	$	(444,250)
Capital Assets Increased due to Capitalized Costs, Recorded Accounts Payable and Asset Reclassifications	$	7,589,521
Increase in Fair Value of Investments, Net	$	378,689
Amortization of Deferred Charge on Bond Refunding	$	4,399,753
Amortization of Bond Premium	$	(5,443,364)

The accompanying notes are an integral part of the basic financial statements.

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 61 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.

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 statement of net position; statement of revenues, expenses and changes in net position; and statement 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.

Changes in accounting principles require retrospective application in comparative statements. In year 2018, the District implemented Governmental Accounting Standards Board (GASB), GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* which required a restatement to 2017 ending Net Position, see Note 3.

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 statement of net position. The statement of revenues, expenses and changes in net position presents increases (i.e., revenues) and decreases (i.e., expenses) in net total position. The statement of cash flows provides 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.

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 year ended December 31, 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 deposits approximate fair value due to the relative short maturities of these financial instruments.

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, 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, 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 Bonds, 2014 Wastewater Improvement Revenue Refunding Bonds, the 2016 Series Wastewater Improvement Revenue Refunding Bonds and the 2017 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, 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 amount is $24,204,000 at December 31, 2018.

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.

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 statement 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 $5,000. 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	Estimated Lives
Interceptor Sewer Lines	Primarily 75 years
Buildings, Structures and Improvements and Equipment	Primarily 40 years
Sewage Treatment and Other Equipment	5 to 20 years
Right to Use-Intangible	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 statement 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 statement of net position.

Deferred Outflows of Resources

In addition to assets, the statement 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 statement 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 8 and Note 9. 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 statement of net position.

Note 2: Summary of Significant Accounting Policies (continued)

Deferred Inflows of Resources

In addition to liabilities, the statement 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 statement of net position and explained respectively in Notes 8 and 9.

Pensions/OPEB Liabilities

For purposes of measuring the net pension/OPEB liability, 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 systems report investments at fair value.

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, restricted 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; unrestricted portion of net position, 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, 2018:

Note 2: Summary of Significant Accounting Policies (continued)

Net Position (continued)

		2018
General Operating Reserve	$	34,311,096
Equipment Repair and Replacement Reserve		57,672,441
Insurance Reserve		21,004,774
Rate Stabilization Account		18,000,000
Capital Project Account		146,004,997

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 $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, 2018 are unbilled sewage service fees of $21,542,054. Included in stormwater service fees receivable at December 31, 2018 are unbilled stormwater service fees of $2,077,875.

Note 2: Summary of Significant Accounting Policies (continued)

Revenues and Expenses (continued)

In June 2011, the Board of Trustees approved rate increases scheduled for the years 2012 through 2016. Effective January 1, 2012 the minimum charge was eliminated, and a base charge was added to all quarterly bills. Rates charged to customers will increase approximately 13.0% for customers in the City of Cleveland, and 12.0% for the suburban customers. In addition to the current rate reduction Homestead Program, the District has added two new affordability programs - the Crisis Voucher Program and a Wastewater Affordability Program for those households with income level at or below 200.0% poverty level.

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 and the 2017 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 statement 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 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 year ended December 31, 2018.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Notes to the Basic Financial Statements

December 31, 2018

Note 3: Restatement of Net Position

For 2018, the District implemented the Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits other than Pensions*. GASB 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, and expense/expenditures. The implementation of this pronouncement had the following effect on net position as reported December 31, 2017:

	District Activities
Net Position December 31, 2017	$ 1,489,368,235
Adjustments:	
Net OPEB Liability	(36,826,620)
Deferred Outflow - Payments Subsequent to Measurement Date	602,885
Restated Net Position December 31, 2017	$ 1,453,144,500

Other than employer contributions subsequent to the measurement date, the District made no adjustments for deferred outflows or deferred inflows of resources from the state retirement plans for the prior year as the relevant information was not available.

Note 4: 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, 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 is 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 is stormwater cash and cash equivalents, and is 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 by 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, 2018, one of the District’s two financial institutions joined OPCS.

Note 4: Deposits and Investments (continued)

Investments

The District's investment policies are currently governed by its Series 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 and 2017 Series Bonds.

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.

Note 4: Deposits and Investments (continued)

Credit Risk (continued)
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, 2018, the District's investment in U.S. instrumentalities (Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, Federal Home Loan Bank, Federal Farm Credit Bank) 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.

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 $65,684,044 has maturities of $60,705,977 in less than one year and $4,978,067 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 $14,218,413 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 ten percent of the District's investments are in Federal Home Loan Bank, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation and Federal Farm Credit Bank.

Note 5: 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 2018:

		2018
Amounts due from District customers at beginning of year for invoices rendered by the City	$	111,416,459
Amounts billed to District customers by the City during the year		337,429,181
Cash collected from District customers by the City and remitted to the District during the year		(323,271,432)
Write off of inactive accounts		(7,555,613)
Cash collected directly by the District on invoices rendered by the City and other adjustment		1,492,690
Balance due from customers at end of year, included in service fees receivable before allowance for doubtful accounts	$	119,511,285

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 2018 were $8,160,961; of which, $1,383,169 are included in accounts payable on the District's statement of net position.

Note 6: Capital Assets and Depreciation

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

	Balance December 31, 2017	Additions	Retirements	Transfers	Balance December 31, 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, 2018. Below is a schedule of the amounts to be expensed in future years:

Year Ending December	Amortization of Intangible Asset
2019	$ 183,369
2020	183,369
2021	183,369
2022	183,369
2023	183,369
2024-2028	916,843
2029-2033	916,843
2034-2038	916,843
2039-2042	733,475
	$ 4,400,849

Note 7: Long-Term Obligations

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

	Interest Rate		2018
Wastewater Improvement Revenue Bonds, Series 2010:			
Serial Bonds Maturing 2026 through 2040	5.44%-6.04%	$	336,930,000
Wastewater Improvement Revenue Bonds, Series 2013:			
Serial Bonds Maturing 2020 through 2043	2.00%-5.00%		24,730,000
Wastewater Improvement Revenue Bonds, Series 2014A:			
Serial Bonds Maturing 2017 through 2049	1.75%-5.00%		332,585,000
Wastewater Improvement Revenue Refunding Bonds, Series 2014B:			
Serial Bonds Maturing 2018 through 2033	4.00%-5.00%		65,440,000
Wastewater Improvement Revenue Refunding Bonds, Series 2016:			
Serial Bonds Maturing 2017 through 2036	3.00%		21,955,000
Wastewater Improvement Revenue Refunding Bonds, Series 2017:			
Serial Bonds Maturing 2023 through 2043	3.00-5.00%		241,595,000
Water Pollution Control Loans Payable through 2054	2.44%-5.20%		595,876,147
Total Debt			1,619,111,147
Less Current Maturities			(44,545,380)
Bond Premium (Discount), Net			48,512,807
Total Long-Term Debt		$	1,623,078,574

Note 7: 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.

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 payments amount received in 2018 was $6,497,151, which is a reduction of $444,250 due to the recent sequester by Congress. The subsidy payment for 2019 also has been reduced by 6.40% in the amount of $444,250 and all future subsidy payments have been reduced by 6.40% based on 2018 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
2019	$ 6,497,151
2020	6,497,151
2021	6,497,151
2022	6,497,151
2023	6,497,151
2024-2028	32,255,943
2029-2033	27,854,241
2034-2038	17,399,610
2039-2040	2,352,395
	$ 112,347,944

Note 7: 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.

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. The 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.

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 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.

Note 7: Long-Term Obligations (continued)

Wastewater Improvement Revenue Refunding Bonds, Series 2016 (continued)

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 its Wastewater Improvement Revenue Bonds, Series 2013 (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.

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 and 2017 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 a SRF loan award related to a project which was not complete as of December 31, 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, 2018 follow:

Note 7: Long-Term Obligations (continued)

<u>Water Pollution Control Loans (continued)</u>

Completion or Expected Completion Year of Projects	Number of Projects		Current Amount Including Accrued Construction Period Interest		Additional Available Borrowings Including Construction Period Interest
1993 – 2017	42	$	406,323,375	$	7,508,906
2018 – 2023	14		189,552,772		325,811,190
		$	595,876,147	$	333,320,096

<u>Defeasance Transactions</u>

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, 2018, $65,440,000 of the portion of refunded debt remained 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, 2018, $21,955,000 of the portion of refunded debt remained outstanding. The Series 2016 Bonds are not subject to redemption at the option of the District prior to their stated maturity.

Note 7: Long-Term Obligations (continued)

<u>Defeasance Transactions (continued)</u>

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. This difference, reported in the accompanying statements of net position as a deduction from long-term debt, is being charged to interest expense on long-term debt through the year 2018 using the weighted average method. There was $15,654,149 unamortized balance of the deferred charge on refunding at December 31, 2018. As of December 31, 2018, $241,595,000 of the portion of refunded debt remained 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.

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, 2018 follows:

	Wastewater Improvement Revenue Bonds Series 2010		Wastewater Improvement Revenue Bonds Series 2013	
	Principal	Interest	Principal	Interest
2019	$ -	$ 13,335,422	$ -	$ 951,850
2020	-	13,335,422	4,515,000	951,850
2021	-	13,335,422	3,850,000	801,250
2022	-	13,335,422	1,915,000	666,750
2023	-	13,335,422	-	578,000
2024-2028	23,150,000	66,205,423	-	2,890,000
2029-2033	84,610,000	57,170,914	14,450,000	2,414,000
2034-2038	150,395,000	35,712,752	-	-
2039-2040	78,775,000	4,828,297	-	-
Total	$ 336,930,000	$ 230,594,496	$ 24,730,000	$ 9,253,700

Note 7: Long-Term Obligations (continued)

Future Debt Service Requirements (continued)

	Wastewater Improvement Revenue Bonds Series 2014A		Wastewater Improvement Revenue Refunding Bonds Series 2014B	
	Principal	Interest	Principal	Interest
2019	$ 3,000,000	$ 15,300,775	$ 3,155,000	$ 3,054,213
2020	-	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
2024-2028	5,405,000	75,492,375	21,305,000	9,740,650
2029-2033	13,930,000	73,216,125	27,115,000	3,936,250
2034-2038	23,790,000	68,979,925	-	-
2039-2043	47,535,000	61,633,750	-	-
2044-2048	193,905,000	36,723,600	-	-
2049	45,020,000	1,976,800	-	-
Total	$ 332,585,000	$ 393,926,450	$ 65,440,000	$ 27,705,863

	Wastewater Improvement Revenue Refunding Bonds Series 2016		Wastewater Improvement Revenue Refunding Bonds Series 2017	
	Principal	Interest	Principal	Interest
2019	$ 165,000	$ 658,650	$ 555,000	$ 9,646,213
2020	170,000	653,700	585,000	9,618,464
2021	175,000	648,600	615,000	9,589,213
2022	180,000	643,350	645,000	9,558,463
2023	190,000	637,950	1,185,000	9,526,212
2024-2028	1,025,000	3,101,250	23,510,000	45,462,562
2029-2033	1,190,000	2,938,050	26,920,000	38,713,561
2034-2038	18,860,000	1,142,850	63,175,000	31,256,612
2039-2043	-	-	124,405,000	15,114,050
Total	$ 21,955,000	$ 10,424,400	$ 241,595,000	$ 178,485,350

Note 7: Long-Term Obligations (continued)

Future Debt Service Requirements (continued)

	Water Pollution Control Loans		Future Debt Service Requirements Total	
	Principal	Interest	Principal	Interest
2019	$ 37,670,380	$ 11,595,278	$ 44,545,380	$ 54,542,401
2020	36,593,633	11,486,372	45,088,633	54,182,583
2021	37,927,543	11,498,429	45,952,543	53,848,439
2022	39,379,194	11,147,556	45,669,194	53,157,816
2023	39,646,696	10,063,162	44,726,696	51,800,021
2024-2028	155,994,575	38,364,842	230,389,575	241,257,102
2029-2033	119,702,424	21,492,097	287,917,424	199,880,997
2034-2038	73,090,056	9,210,742	329,310,056	146,302,881
2039-2043	23,073,019	4,397,663	273,788,019	85,973,760
2044-2048	18,700,688	2,515,039	212,605,688	39,238,639
2049-2053	12,919,249	683,387	57,939,249	2,660,187
2054	1,178,690	19,217	1,178,690	19,217
Total	$ 595,876,147	$ 132,473,784	$ 1,619,111,147	$ 982,864,043

Bond premium and discount activity for 2018 is as follows:

December 31, 2018	Beginning Balance	Amortized	Refunded	Issued	Ending 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

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Notes to the Basic Financial Statements

December 31, 2018

Note 7: Long-Term Obligations (continued)

Future Debt Service Requirements (continued)

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

December 31, 2018	Beginning Balance	Additions	Reductions	Ending Balance	Due 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
Net Pension Liability	77,659,205	-	(20,740,879)	56,918,326	-
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

Note 8: Pension Plans

Net Pension/Other Postemployment Benefits (OPEB) Liability

The net pension/OPEB liability reported on the Statement of Net Position represents a liability 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 liability (asset) 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. Resulting adjustments to the net pension/OPEB liability 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 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 9 for the required OPEB disclosures.

Note 8: 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, 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	**Group B**	**Group C**
Eligible to retire prior to January 7, 2013 or five years after January 7, 2013	20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013	Members not in other Groups and members hired on or after January 7, 2013
State and Local	**State and Local**	**State and Local**
Age and Service Requirements:	**Age and Service Requirements:**	**Age and Service Requirements:**
Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age 57 with 25 years of service credit or Age 62 with 5 years of service credit
Formula:	**Formula:**	**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	2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30	2.2% of FAS multiplied by years of service for the first 35 years and 2.5% for service years in excess of 35

Note 8: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS) (continued)

Members who retire before meeting the age and years of service credit requirement for unreduced benefits receive a percentage reduction in the benefit amount.

When a benefit recipient under the traditional plan has received benefits for 12 months, an annual cost of living adjustment (COLA) is provided on the member's base benefit. This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. For those retiring prior to January 7, 2013, the COLA will continue to be a 3 percent simple annual COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, the COLA will be based on the average percentage increase in the Consumer Price Index, capped at 3 percent. Additionally, 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 plan.

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 pension 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 (the defined benefit element) and a defined contribution element. Eligibility regarding age and years of service in the combined plan is the same as the traditional pension plan. The subsequent 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 combined pension plan (see OPERS CAFR referenced above for additional information).

The combined plan service benefit formula varies from the traditional plan and is in the table shown below:

Group A Eligible to retire prior to January 7, 2013 or five years after January 7, 2013	**Group B** 20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013	**Group C** Members not in other Groups and members hired on or after January 7, 2013
State and Local	**State and Local**	**State and Local**
Age and Service Requirements: Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	**Age and Service Requirements:** Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	**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 30 years and 1.25% for service years in excess of 30	**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	**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

Note 8: Pension Plans (continued)

Ohio Public Employees Retirement System (OPERS) (continued)

Members retiring under the combined plan receive a 3 percent COLA on the defined benefit portion of their benefit. This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. For those retiring prior to January 7, 2013, the COLA will continue to be a 3 percent simple annual COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, the COLA will be based on the average percentage increase in the Consumer Price Index, capped at 3 percent. Additionally, 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 combined plan.

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 purchase of a monthly defined benefit annuity from OPERS (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 - applicable to traditional, combined and member-directed plans: The Ohio Revised Code provides statutory authority for member and employer contributions and currently limits the employer contribution to a rate not to exceed 14 percent 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 percent of covered payroll for members in the state and local classifications. Members in state and local classifications contributed 10 percent of covered payroll.

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 1% for 2017 and 0% for 2018. 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 2018 was $6,728,485. The contractually required contribution for the combined plan net of postemployment health care benefits for 2018 was $382,655. Of these amounts, $729,039 is reported as an intergovernmental payable in Other Accrued Liabilities for 2018.

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.

Note 8: Pension Plans (continued)

Actuarial Assumptions – OPERS (continued)

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 period December 31, 2017 was 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 – 2017

	OPERS Traditional Plan	OPERS Combined Plan
Actuarial Information		
Valuation Date	December 31, 2017	December 31, 2017
Experience Study	5-year period ended December 31, 2015	5-year period ended 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	3.25-10.05%	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 then 2.15% Simple	3.00% Simple through 2018 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.

For 2016 and prior actuarial valuations, mortality rates were based on the RP-2000 Combined Mortality Table (Projection 2022 – Scale AA) for males and females. Males' ages are set-back two years through age 89 and no set-back for age 90 and above. Females younger than age 80 are set back four years, one year set back from age 80 through 89, and no set back from age 90 and above.

Note 8: Pension Plans (continued)

Actuarial Assumptions – OPERS (continued)

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 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 2017 and the long-term expected real rates of return:

Asset Class	Target Allocation	2017 Weighted Average Long-Term Expected 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	18.0%	5.26%
Total	100.0%	5.66%

Discount Rate The discount rate used to measure the total pension liability for measurement year 2017 was 7.5%. 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.

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 calculated using the current period discount rate assumption of 7.5%, as well as what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower (6.5%) or one-percentage-point higher (8.5%) than the current rate:

Note 8: Pension Plans (continued)

Actuarial Assumptions – OPERS (continued)

District's proportionate share of net pension (asset) at December 31, 2018:

	1% Decrease (6.5%)	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)

Changes between Measurement Date and Report Date In October 2018, the OPERS Board voted to lower the investment return assumption for its defined benefit fund from 7.5% to 7.2%. This assumption change will impact OPERS annual actuarial valuation prepared as of December 31, 2018.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The net pension liability for OPERS as of December 31, 2018 was measured as of December 31, 2017. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates. The District's proportion of the net pension liability 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. Where previously we presented year to year comparison of changes in pension liabilities and pension expense by plan, the following table reflects the proportionate share of pension expense for the current and prior years for all plans and thus the District, in total. The related deferred outflows and deferred inflows of resources associated with the pension liability are presented below.

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 liabilities	$ 56,918,326	$ -	$ 56,918,326
Pension expense	$ 13,617,583	$ 143,098	$ 13,760,681

Note 8: Pension Plans (continued)

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

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

	OPERS Traditional	OPERS Combined	Total
Deferred outflow of resources			
District contributions subsequent to the measurement date	$ 6,728,485	$ 382,655	$ 7,111,140
Differences in employer contributions and change in proportionate share	2,654,920	-	2,654,920
Difference between expected and 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 and change in proportionate share	$ 1,035	$ 56,331	$ 57,366
Differences between projected and actual earnings on pension plan investments	12,219,614	147,039	12,366,653
Difference between expected and actual experience	1,121,681	277,633	1,399,314
Total deferred inflow of resources	$ 13,342,330	$ 481,003	$ 13,823,333

The $7,111,140 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, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

	OPERS Traditional	OPERS Combined	Total
Fiscal Year Ending December 31:			
2019	$ 6,500,853	$ (54,100)	$ 6,446,753
2020	74,075	(58,122)	15,953
2021	(5,380,870)	(91,064)	(5,471,934)
2022	(5,021,219)	(87,588)	(5,108,807)
2023	-	(35,959)	(35,959)
2024-2027	-	(72,729)	(72,729)
	$ (3,827,161)	$ (399,562)	$ (4,226,723)

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions

Plan Description - Ohio Public Employees Retirement System

The District has one specific plan, OPERS that qualify as OPEB according to guidelines presented within GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions.*

Ohio Public Employees Retirement System (OPERS) administers three separate pension plans: The Traditional Pension Plan—a cost-sharing, multiple-employer defined benefit pension plan; the Member-Directed Plan—a defined contribution plan; and the Combined Plan—a cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and 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 authority requiring public employers to fund 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 2018, State and Local employers contributed at a rate of 14.0% of earnable salary. These are the maximum employer contribution rates permitted by the Ohio Revised Code. Active member contributions do not fund health care.

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Plan Description - Ohio Public Employees Retirement System (continued)

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 1% 2017. As recommended by OPERS' actuary, the portion of employer contributions allocated to health care beginning January 1, 2018 decreased to 0% for both plans. 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. The employer contribution as a percentage of covered payroll deposited into the RMA for participants in the member-directed plan for 2017 was 4%.

The OPEB liability for OPERS were determined by an actuarial valuation as of December 31, 2016, rolled forward to the measurement date of December 31, 2017, by incorporating the expected value of health care cost accruals, the actual health care payment, and interest accruals during the year. The District's proportion of the net OPEB liability was based on the District's share of contributions to the respective retirement systems relative to the contributions of all participating entities. The District's proportionate share of the OPERS net OPEB liability as of December 31, 2018 was $42,429,314. As this is the first year of implementation, prior year information was not available to provide comparative analysis of changes.

Changes in actuarial valuation of the net OPEB liability, changes in deferred outflows and deferred inflows, subsequent plan contributions and amortization of changes in proportionate share from year to year may have either a positive or negative effect to the District's recognition of OPEB expense for the period. As this is the first year of implementing the change in financial reporting as required under GASB Statement No. 75, prior year comparable data is unavailable. In 2018, the District's recognition of its proportionate share of OPEB expense with respect to OPERS Ohio's health benefit plans resulted in OPEB expense of $4,467,831.

Deferred outflows and deferred inflows represent the effect of changes in the net OPEB liability due to the difference between projected and actual investment earnings, differences between expected and actual actuarial experience, changes in assumptions, changes in plan design and changes in the employers' proportion of the collective net OPEB liability. The deferred outflows and deferred inflows are to be included in OPEB expense over current and future periods. The difference between projected and actual investment earnings is recognized in OPEB expense using a straight-line method over five years beginning in the current year. Deferred outflows and deferred inflows resulting from changes in sources other than differences between projected and actual investment earnings are amortized over a 3.0916 years using a straight line method which represents the average expected remaining service lives of all members (both active and inactive). Employer contributions to the OPEB plan subsequent to the measurement date are required to be reported as a deferred outflow of resources. Deferred outflows were $4,898,449 while deferred inflows were $3,160,701 related to the District's share of OPERS OPEB deferred resources for 2018.

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.

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Actuarial Assumptions – OPERS (continued)

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 was determined by an actuarial valuation as of December 31, 2016, rolled forward to the measurement date of December 31, 2017.

The actuarial valuation used the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB 75:

	Assumptions
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	3.85%
Healthcare cost trend	Initial 7.5% to 3.25% ultimate in 2028

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.

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions (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 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 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.

Asset Class	Target Allocation	Expected Real Rate of Return*
Fixed Income	34.0%	1.88%
Domestic Equities	21.0%	6.37%
Real Estate Investments	6.0%	5.91%
International Equities	22.0%	7.88%
Other investments	17.0%	5.39%
Total	100.0%	4.98%

* 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 3.85% was used to measure the OPEB liability on the measurement date of December 31, 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 6.50% and a municipal bond rate of 3.31%. 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 2034. As a result, the long-term expected rate of return on health care investments was applied to projected costs through the year 2034, and the municipal bond rate was applied to all health care costs after that date.

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

Actuarial Assumptions – OPERS (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 3.85%, 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.

	1% Decrease (2.85%)	Discount Rate (3.85%)	1% Increase (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. 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.

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 2018 is 7.50%. 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.

	1% Decrease	Health Care Cost Current Discount Rate	1% Increase
District's proportionate share of the net OPEB liability	$ 40,595,808	$ 42,429,314	$ 44,323,277

Changes between Measurement Date and Report Date In October 2018, the OPERS Board voted to lower the investment return assumption for its health care investment portfolio from 6.5% to 6%. This assumption change will impact OPERS annual actuarial valuation prepared as of December 31, 2018.

Note 9: Defined Benefit, Postemployment Benefits Other Than Pensions (continued)

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

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		
Differences between projected and actual earnings on plan investments	$	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
Deferred inflow of resources		
Difference between projected and actual earnings on plan investments	$	3,160,701
Total deferred inflow of resources	$	3,160,701

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.

Amounts reported as deferred outflow of resources and deferred inflow of resources, including change in proportionate share, difference between expected and actual experience, changes in assumptions and difference in projected versus actual earnings on investments are amortized as OPEB expense over subsequent periods. The unamortized portion of deferred outflows and deferred inflows are presented below.

		Total
Fiscal Year Ending December 31:		
2019	$	1,551,788
2020		1,551,788
2021		(575,653)
2022		(790,175)
	$	1,737,748

Note 10: 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, 2018, the assets of both plans met the applicable trust requirements and are therefore excluded from the District's financial statements.

Note 11: 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:

	Beginning Balance	Claims Paid	Increase in Estimate	Ending Balance
2018	$ 72,533	$ (21,270)	$ -	$ 51,263

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, 2018 is estimated to be paid during the year ending December 31, 2019. The District's insurance reserves as of December 31, 2018 were $21,004,774 and are included in short-term investments on the District's statement 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.

Note 11: Risk Management (continued)

The claims liability of $1,017,297 reported at December 31, 2018, was 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 balance as of December 31, 2018 is estimated to be paid during the year ending December 31, 2019.

Changes in the claims liability amount in 2018 is as follows:

	Beginning of Year	Current year Claims	Claims Payment	End of Year
2018	$ 996,419	$ 10,359,376	$ (10,338,498)	$ 1,017,297

Note 12: 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, 2018 $108,567 is included in the receivables from Federal, State and other agencies on the accompanying statement of net position. The parties entered into a revised, “interest-free” repayment agreement, to repay the loan over a five-year period.

Combined Sewer Overflows Long-Term Control Plan

The District finalized Consent Decree negotiations with the Ohio EPA and U.S. EPA, U.S. Department of Justice, and the Ohio Attorney General’s Office. The Board of Trustees authorized the signature of the Consent Decree and it was logged with the U.S. District Court in December 2010. The Consent Decree was approved by the Court on July 7, 2011.

Implementation of the Combined Sewer Overflows (CSO) Long-Term Control Plan under the Consent Decree began 30 days after approval by the U.S. District Court, although the District had already begun work on certain projects required under the Consent Decree. Funding for those projects is included in the District’s existing capital plan. The District currently estimates the costs for implementing the CSO capital improvement program to be approximately $3 billion in 2009 dollars. These expenditures constitute a “high burden” on District ratepayers and based upon the estimated costs of the program and high burden status, the District received a 25-year implementation schedule.

Upon approval of the Consent Decree, the District paid civil penalties to the United States and State of Ohio in cash in the amount of $1.2 million. To mitigate additional civil penalties, the District implemented a federal Supplemental Environmental Project (SEP) in the amount of $1 million to provide for the collection and disposal of household hazardous waste. In 2010, the District entered into an agreement with the Cuyahoga County Solid Waste Management District to satisfy the federal SEP obligation. As of December 31, 2018, the District has satisfied the federal SEP obligation and has no outstanding liability.

Note 12: Commitments and Contingencies (continued)

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 13: 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. These inputs reflect management's judgment about the assumptions that a market participant would use in pricing the asset and are based on the best available information which has been internally developed.

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

	Level 1	Level 2	Level 3	Total at 12/31/2018
Short -Term Investments				
Money Market Funds	$ 156,665,182	$ -	$ -	$ 156,665,182
CDs	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 Fund				
Money Market Funds	3,928	-	-	3,928
U.S. Gov't Obligations	-	14,214,485	-	14,214,485
	$ 166,209,341	$ 124,663,294	$ -	$ 290,872,635

Note 14: Changes in Accounting Principles

For the year ended December 31, 2018, the District implemented the following Governmental Accounting Standards issued by the Governmental Accounting Standards Board (GASB):

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. These changes were incorporated in the District's 2018 financial statements; and the effect on beginning net position is disclosed in Note 3 and additional information is presented in Notes 8 and 9.

GASB Statement No. 82, *Pension Issues – An Amendment of GASB Statements No. 67, No. 68 and No. 73*. The objective of this Statement is to address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. These changes were incorporated in the District's 2018 financial statements; however, there was no effect on beginning net position.

GASB Statement No. 85, *Omnibus 2017*. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. The implementation of this GASB pronouncement did not result in any changes to the District's financial statements.

GASB Statement No. 86, *Certain Debt Extinguishment Issues* establishes standards of accounting and financial reporting for in-substance defeasance transactions in which cash and other monetary assets acquired with only existing resources—that is, resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the purpose of extinguishing debt. The implementation of this GASB pronouncement did not result in any changes to the District's financial statements.

Pronouncements Issued but Not Effective:
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. This pronouncement is effective for reporting periods beginning after December 15, 2018. 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. The effective date of this standard is reporting periods beginning after December 15, 2019. The District has not yet determined the impact that this GASB pronouncement will have on its financial statements and disclosures.

Note 14: Changes in Accounting Principles (continued)

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. The effective date for this standard is reporting periods beginning after December 15, 2019. The District has not yet determined the impact that this GASB pronouncement will have on its financial statements and disclosures.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

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 Five Years *

Traditional Plan	2018	2017	2016	2015	2014
District's Proportion of the Net Pension Liability	0.362813%	0.341986%	0.336154%	0.336024%	0.336024%
District's Proportionate Share of the Net Pension Liability	$ 56,918,326	$ 77,659,205	$ 58,226,111	$ 40,528,251	$ 39,612,852
District's Covered Payroll	$ 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	108.81%	190.01%	117.78%	83.51%	94.00%
Plan Fiduciary Net Position as a Percentage of the Pension Liability	84.66%	77.25%	81.08%	86.45%	n/a

Combined Plan	2018	2017	2016	2015	2014
District's Proportion of the Net Pension Asset	0.684592%	0.583779%	0.531290%	0.535543%	0.535543%
District's Proportionate Share of the Net Pension Asset	$ 931,951	$ 324,913	$ 258,537	$ 206,196	$ 56,194
District's Covered Payroll	$ 3,011,061	$ 2,189,365	$ 2,275,217	$ 2,233,128	$ 1,939,145
District's Proportionate Share of the Net Pension Asset as a Percentage of Its Covered Payroll	30.95%	14.84%	11.36%	9.23%	2.90%
Plan Fiduciary Net Position as a Percentage of the Total Pension Asset	137.28%	116.55%	116.90%	114.83%	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 2014 is not available.
An additional column will be added each year.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Required Supplementary Information

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

For the Last Two Years *

	2018	2017
District's Proportion of the Net OPEB Liability	0.390720%	0.364608%
District's Proportionate Share of the Net OPEB Liability	$ 42,429,314	$ 36,826,620
District's Covered Payroll	$ 60,288,529	$ 46,660,550
District's Proportion of the Net OPEB Liability as a Percentage of Its Covered Payroll	70.38%	78.92%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	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.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Required Supplementary Information

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

For the Last Ten Years

	2018	2017	2016	2015	2014
Contractually Required Contributions	$ 6,728,485	$ 6,800,173	$ 4,904,484	$ 5,932,293	$ 5,823,387
Contributions in Relation to Contractually Required Contributions	(6,728,485)	(6,800,173)	(4,904,484)	(5,932,293)	(5,823,387)
Contribution Deficiency (Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 48,060,622	$ 52,309,025	$ 40,870,702	$ 49,435,775	$ 48,528,228
Contribution as a Percentage of Covered Payroll	14.00%	13.00%	12.00%	12.00%	12.00%

	2013	2012	2011	2010	2009
Contractually Required Contributions	$ 5,478,156	$ 5,244,880	$ 4,944,124	$ 4,839,569	$ 4,726,331
Contributions in Relation to Contractually Required Contributions	(5,478,156)	(5,244,880)	(4,944,124)	(4,839,569)	(4,726,331)
Contribution Deficiency (Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 42,139,663	$ 52,448,799	$ 49,441,242	$ 53,772,993	$ 55,603,893
Contribution as a Percentage of Covered Payroll	13.00%	10.00%	10.00%	9.00%	8.50%

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Required Supplementary Information

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

For the Last Ten Years

	2018	2017	2016	2015	2014
Contractually Required Contributions	$ 382,655	$ 391,438	$ 262,724	$ 273,026	$ 267,975
Contributions in Relation to Contractually Required Contributions	(382,655)	(391,438)	(262,724)	(273,026)	(267,975)
Contribution Deficiency (Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 2,733,250	$ 3,011,061	$ 2,189,365	$ 2,275,217	$ 2,233,128
Contribution as a Percentage of Covered Payroll	14.00%	13.00%	12.00%	12.00%	12.00%

	2013	2012	2011	2010	2009
Contractually Required Contributions	$ 252,089	$ 241,354	$ 227,514	$ 222,703	$ 217,492
Contributions in Relation to Contractually Required Contributions	(252,089)	(241,354)	(227,514)	(222,703)	(217,492)
Contribution Deficiency (Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 1,939,145	$ 2,413,542	$ 2,275,143	$ 2,474,477	$ 2,558,730
Contribution as a Percentage of Covered Payroll	13.00%	10.00%	10.00%	9.00%	8.50%

NORTHEAST OHIO REGIONAL SEWER DISTRICT

Required Supplementary Information

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

For the Last Three Years *

	2018	2017	2016
Contractually Required OPEB Contributions	$ -	$ 602,885	$ 933,211
OPEB Contribution as a Percentage of Covered Payroll	0.00%	1.00%	2.00%
Covered Payroll	$ 55,780,664	$ 60,288,529	$ 46,660,550
Healthcare % per pension Note 9	0.00%	1.00%	2.00%
Covered payroll * healthcare %	-	602,885	633,211
Surcharge	-	-	-
Contractually Required OPEB Contribution	$ -	$ 602,885	$ 633,211

* 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.

Note 1: Ohio's Public Employment Retirement Systems (OPERS) Pension & Postemployment Benefits

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

Amounts reported for fiscal year 2017 incorporate changes in assumptions used by OPERS in calculating the total pension liability in the latest actuarial valuation. These new assumptions compared with those used prior to fiscal year 2017 are presented below for the measurement periods indicated.

	OPERS Traditional Plan	OPERS Combined Plan
Valuation Date	December 31, 2017	December 31, 2017
Experience Study	5-year period ended December 31, 2015	5-year period ended 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:	3% Simple	3% Simple
Pre-Jan 7, 2013 Retirees	3% Simple	3% Simple
Post-Jan 7, 2013 Retirees	3% Simple through 2018 then 2.15% Simple	3% Simple though 2018 then 2.15% Simple

The 2017 measurement assumptions are reflected in the 2018 liabilities in Notes 8 and 9 and RSI tables.

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.

With regard to OPERS OPEB assumptions, actuarial valuations as of December 31, 2016 were rolled-forward to December 31, 2017. The assumptions used in the valuation were based on the results of an actuarial experience study for the five-year period ended December 31, 2015.

Mortality tables and rates were the same as those applied in the actuarial valuation of pensions.

Note 1: Ohio's Public Employment Retirement Systems (OPERS) Pension & Postemployment Benefits

Mortality rates - Amounts reported beginning in 2017 use mortality rates based on the RP-2014 (continued)

In October 2018, the OPERS Board voted to lower the investment return assumption for its defined benefit fund from 7.5% to 7.2%. This assumption change will impact OPERS annual actuarial valuation prepared as of December 31, 2018. In addition, the OPERS Board voted to lower the investment return assumption for its health care investment portfolio from 6.5% to 6%. These assumption changes will impact OPERS annual actuarial valuation prepared as of December 31, 2018.

Changes in Assumptions – OPERS OPEB

For 2018, the single discount rate changed from 4.23 percent to 3.85 percent.

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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, 2018

	Original Budget	Final Budget	Actual	Variance with Final Budget Positive (Negative)
Revenues:				
User Charges:				
Billed	$ 347,630,350	$ 347,630,350	$ 368,630,760	$ 21,000,410
Other Revenue	1,537,152	1,537,152	1,392,876	(144,276)
Total Revenues	349,167,502	349,167,502	370,023,636	20,856,134
Expenses:				
Salary and Wages	58,284,581	58,284,581	55,332,668	2,951,913
Fringe Benefits	23,539,426	23,539,426	31,917,776	(8,378,350)
Power	10,885,559	10,885,559	11,216,797	(331,238)
Materials and Supplies	7,413,861	7,413,861	7,816,290	(402,429)
Collection Fees	8,719,400	8,719,400	8,275,350	444,050
Gas	1,685,376	1,685,376	1,689,079	(3,703)
Chemicals	2,884,026	2,884,026	2,617,257	266,769
Repairs and Maintenance	4,138,713	4,138,713	2,837,255	1,301,458
Solids Handling	1,847,919	1,847,919	1,459,652	388,267
Water	1,238,881	1,238,881	1,007,341	231,540
Professional Services	33,081,803	33,081,803	29,405,301	3,676,502
Insurance	985,000	985,000	882,305	102,695
Judgements and Awards	890,000	890,000	731,283	158,717
Other Operating Expenses	28,006,751	28,006,751	17,144,335	10,862,416
Capitalized Construction Costs	(9,000,000)	(9,000,000)	(8,159,225)	(840,775)
Depreciation	71,426,485	71,426,485	71,733,140	(306,655)
Total Operating Expenses	246,027,781	246,027,781	235,906,604	10,121,177
Excess of Revenues Over Operating Expenses	$ 103,139,721	$ 103,139,721	$ 134,117,032	$ 30,977,311

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, 2018

Reconciliation to Change in Net Position:		
Excess of Operating Revenues Over Operating Expenses	$	134,117,032
Interest Revenue		5,573,074
Increase in Fair Value of Investments, Net		378,689
Non-Operating Grant Revenue		521,873
Non-Operating Grant Expenses		(4,534)
Loss on Disposals of Equipment		(385,744)
Interest Expense on Long-Term Debt		(59,784,224)
Green Infrastructure Program		(1,361,640)
Member Infrastructure Community Program		(4,911,520)
Stormwater Community Cost Share Disbursement		(4,218,308)
Federal Subsidy Revenue		6,497,151
Change in Net Position		76,421,849
Net Position at Beginning of Year		1,453,144,500
Net Position at End of Year	$	1,529,566,349

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, 2018

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

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**

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

	2018	Restated 2017 (3)	2016	2015
Net Investment in Capital Assets	$ 1,196,966,572	$ 1,107,066,113	$ 990,664,879	$ 786,650,331
Restricted - Stormwater Community Cost-Share	24,045,802	17,185,754	8,203,008	-
Unrestricted	308,553,975	328,892,633	427,487,655	571,255,854
Total	$ 1,529,566,349	$ 1,453,144,500	$ 1,426,355,542	$ 1,357,906,185

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.

Source: District accounting records.

Restated 2014(2)	2013	Restated 2012 (1)	Restated 2011 (1)	2010	2009
$ 1,018,734,360	$ 1,067,650,046	$ 1,065,405,939	$ 1,055,247,281	$ 1,038,270,319	$ 1,006,102,174
-	-	-	-	-	-
284,669,454	248,677,688	235,652,225	238,611,550	251,770,264	273,486,822
$ 1,303,403,814	$ 1,316,327,734	$ 1,301,058,164	$ 1,293,858,831	$ 1,290,040,583	$ 1,279,588,996

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

	2018	2017	2016	2015	2014
Operating Revenues, Net - Sewage					
Billing Agents	$ 301,523,258	$ 273,964,177	$ 266,840,893	$ 237,570,432	$ 220,621,174
Direct Billed	23,142,825	22,848,020	17,970,171	16,684,685	17,685,946
Other (1)	1,392,876	2,567,476	1,972,379	5,428,088	878,279
Total Operating Revenues, Net - Sewage	326,058,959	299,379,673	286,783,443	259,683,205	239,185,399
Operating Revenues, Net - Stormwater					
Billing Agents	43,029,033	43,734,464	25,487,614	20,424,261	-
Direct Billed	935,644	766,301	765,778	322,691	-
Total Operating Revenues, Net - Stormwater	43,964,677	44,500,765	26,253,392	20,746,952	-
Operating Revenues, Net - District Total	370,023,636	343,880,438	313,036,835	280,430,157	239,185,399
Operating Expenses - Sewage					
Salaries and Wages	52,726,122	52,144,371	49,878,369	47,918,213	46,226,508
Fringe Benefits	31,535,641	29,221,894	22,495,670	14,563,011	14,610,845
Utilities	14,729,821	13,601,569	14,187,719	16,284,328	15,267,723
Professional and Contractual Services	32,255,207	32,211,644	29,842,682	21,988,568	22,286,370
Other (1)	5,708,698	4,575,795	2,587,719	3,725,796	3,807,036
Depreciation	71,733,140	71,496,416	66,605,940	62,825,528	57,171,918
Total Operating Expenses - Sewage	208,688,629	203,251,689	185,598,099	167,305,444	159,370,400
Operating Expenses - Stormwater					
Salaries and Wages	2,606,546	1,353,653	590,438	-	-
Fringe Benefits	382,135	196,233	82,758	-	-
Professional and Contractual Services	23,472,515	19,503,698	4,517,336	-	-
Other (1)	756,779	121,598	50,417	-	-
Total Operating Expenses - Stormwater	27,217,975	21,175,182	5,240,949	-	-
Total Operating Expenses - District Total	235,906,604	224,426,871	190,839,048	167,305,444	159,370,400
Operating Income	134,117,032	119,453,567	122,197,787	113,124,713	79,814,999
Non-Operating Revenues (Expenses), Net					
Interest Revenue	5,573,074	3,833,084	2,901,760	2,526,049	993,560
Increase (Decrease) in Fair Value of Investments, Net	378,689	(518,063)	494,661	(1,173,193)	295,828
Non-Operating Grant Revenue	521,873	206,905	223,125	1,383,547	1,304,233
Non-Operating Grant Expenses	(4,534)	(97,733)	(187,668)	(707,409)	(4,259,001)
Other Non-Operating (Expenses) Revenues (1)	-	-	-	-	-
Proceeds on Insurance Claims (2)	-	7,112	64,597	-	-
Green Infrastructure Program (1)	(1,361,640)	(1,318,460)	-	-	-
Member Community Infrastructure Program (4)	(4,911,520)	(3,118,863)	-	-	-
Stormwater Community Cost Share Disbursement (3	(4,218,308)	(2,626,418)	(72,190)	-	-
Loss on Disposals of Equipment	(385,744)	(301,070)	(3,319,289)	(4,323,785)	(3,913,066)
Loss on Extraordinary Events	-	-	(1,614)	(180,025)	-
Interest Expense on Long-Term Debt	(59,784,224)	(58,980,224)	(60,317,727)	(62,616,911)	(59,922,594)
Federal Subsidy Revenue (5)	6,497,151	6,472,856	6,465,915	6,469,385	6,438,149
Total Non-Operating Revenues (Expenses), Net	(57,695,183)	(56,440,874)	(53,748,430)	(58,622,342)	(59,062,891)
Capital Contributions	-	-	-	-	-
Change in Net Position	$ 76,421,849	$ 63,012,693	$ 68,449,357	$ 54,502,371	$ 20,752,108

(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 expense
(4) Beginning 2017, Green Infrastructure Program is classified to non-operating expenses.
(5) Beginning in 2010 Reclassified Build America Bonds Subsidy. Refer to Note 7.
(6) Restated to comply with GASB 65.

Source: District accounting records.

2013	2012 (6)	2011 (5)	2010	2009
$ 192,601,300	$ 171,056,663	$ 155,342,800	$ 150,703,554	$ 151,132,069
16,227,994	14,832,256	16,275,002	14,663,082	12,697,756
960,830	1,352,457	1,104,565	1,484,110	946,537
209,790,124	187,241,376	172,722,367	166,850,746	164,776,362
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
209,790,124	187,241,376	172,722,367	166,850,746	164,776,362
43,889,545	41,255,137	39,190,544	38,061,309	37,024,254
14,203,943	13,657,026	12,939,019	12,747,900	11,714,646
14,898,125	13,979,812	15,511,558	16,042,200	18,924,173
24,747,308	21,827,170	18,766,341	23,034,225	17,696,366
2,155,767	3,387,828	3,907,002	7,392,509	8,194,326
50,179,846	51,187,381	47,271,807	46,061,584	45,410,351
150,074,534	145,294,354	137,586,271	143,339,727	138,964,116
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
150,074,534	145,294,354	137,586,271	143,339,727	138,964,116
59,715,590	41,947,022	35,136,096	23,511,019	25,812,246
1,879,311	2,827,947	3,825,074	3,292,522	7,240,399
(417,004)	(888,925)	(150,665)	(19,034)	(3,874,343)
1,383,517	758,941	676,833	1,731,894	1,430,784
(1,520,478)	(758,941)	(676,833)	(1,731,894)	(1,430,784)
-	-	-	-	(3,000,000)
-	792,245	621,938	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
(340,588)	(622,504)	(1,020,704)	(45,657)	(2,013,698)
-	-	(1,188,489)	-	-
(51,757,865)	(44,717,920)	(43,019,109)	(26,583,173)	(24,598,935)
6,327,087	6,941,401	6,912,478	858,034	-
(44,446,020)	(35,667,756)	(34,019,477)	(22,497,308)	(26,246,577)
-	920,067	6,161,822	9,437,876	3,963,079
$ 15,269,570	$ 7,199,333	$ 7,278,441	$ 10,451,587	$ 3,528,748

NORTHEAST OHIO REGIONAL SEWER DISTRICT
REVENUES BY TYPE
LAST TEN YEARS

	2018	2017	2016	2015
Operating Revenues, Net				
Sewage and Stormwater Service Fees				
City of Cleveland Billing Agent	$ 338,466,864	$ 311,616,663	$ 275,275,862	$ 242,170,836
Other Billing Agents	6,085,427	6,081,978	17,052,645	15,823,857
Other Sewage and Stormwater Service Fees	24,078,469	23,614,321	18,735,949	17,007,376
Other Operating Revenue	1,392,876	2,567,476	1,972,379	5,428,088
Total Operating Revenues, Net	370,023,636	343,880,438	313,036,835	280,430,157
Non-Operating Revenues, Net				
Interest Revenue	5,573,074	3,833,084	2,901,760	2,526,049
Increase (Decrease) in Fair Value of Investments, Net	378,689	(518,063)	494,661	(1,173,193)
Proceeds from Insurance Claims	-	7,112	64,597 (3)	-
Federal Subsidy Revenue (2)	6,497,151	6,472,856	6,465,915	6,469,385
Non-Operating Grant Revenue	521,873	206,905	223,125	1,383,547
Total Non-Operating Revenues, Net	12,970,787	10,001,894	10,150,058	9,205,788
Capital Contributions	-	-	-	-
Total Revenues	$ 382,994,423	$ 353,882,332	$ 323,186,893	$ 289,635,945

(1) Proceeds from Southerly Flood event.
(2) Beginning in 2010 Reclassified Build America Bonds Subsidy. Refer to Note 7.
(3) Proceeds from 4th floor IT fire.

Source: District accounting records.

2014	2013	2012	2011	2010	2009
$ 206,720,248	$ 179,391,021	$ 159,114,027	$ 144,326,900	$ 140,059,765	$ 141,082,193
13,900,926	13,210,279	11,942,636	11,015,900	10,643,789	10,049,876
17,685,946	16,227,994	14,832,256	16,275,002	14,663,082	12,697,756
878,279	960,830	1,352,457	1,104,565	1,484,110	946,537
239,185,399	209,790,124	187,241,376	172,722,367	166,850,746	164,776,362
993,560	1,879,311	2,827,947	3,825,074	3,292,522	7,240,399
295,828	(417,004)	(888,925)	(150,665)	(19,034)	(3,874,343)
-	-	792,245 (1)	621,938 (1)	-	-
6,438,149	6,327,087	6,941,401	6,912,478	858,034	-
1,304,233	1,383,517	758,941	676,833	1,731,894	1,430,784
9,031,770	9,172,911	10,431,609	11,885,658	5,863,416	4,796,840
-	-	920,067	6,161,822	9,437,876	3,963,079
$ 248,217,169	$ 218,963,035	$ 198,593,052	$ 190,769,847	$ 182,152,038	$ 173,536,281

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

	2018	2017	2016	2015
Salaries and Wages	$ 55,332,668	$ 53,498,024	$ 50,468,807	$ 47,918,213
Fringe Benefits	31,917,776	29,418,128	22,578,428	14,563,011
Power	11,216,797	10,052,193	10,652,319	12,072,308
Materials and Supplies	7,816,290	7,088,671	6,820,729	5,676,639
Collection Fees	8,275,350	8,506,812	8,000,246	7,870,531
Gas	1,689,079	1,326,027	1,314,239	1,818,054
Chemicals	2,617,257	2,062,888	2,390,757	2,865,628
Repairs and Maintenance	2,837,255	3,172,685	2,290,027	3,154,329
Solids Handling	1,459,652	1,546,734	1,763,205	1,170,548
Water	1,007,341	1,159,576	1,069,671	977,437
Professional Services	29,405,301	23,678,268	16,550,378	6,004,935
Insurance	882,305	762,390	764,709	778,421
All Other Expenses	17,875,618	18,981,336	9,627,486	8,353,217
Capitalized Construction Costs	(8,159,225)	(8,323,277)	(10,057,893)	(8,743,355)
Depreciation	71,733,140	71,496,416	66,605,940	62,825,528
Total Operating Expenses	$ 235,906,604	$ 224,426,871	$ 190,839,048	$ 167,305,444

Source : District accounting records.

2014	2013	2012	2011	2010	2009
$ 46,226,508	$ 43,889,545	$ 41,255,137	$ 39,190,544	$ 38,061,309	$ 37,024,254
14,610,845	14,203,943	13,657,026	12,939,019	12,747,900	11,714,646
10,247,703	9,400,085	8,068,363	9,258,484	9,879,693	10,591,495
4,882,158	4,075,901	5,056,453	4,564,897	4,729,166	4,190,172
7,753,358	7,812,254	6,725,143	5,975,072	5,805,347	5,725,215
2,710,438	3,318,117	3,825,221	4,254,679	4,292,298	6,600,201
3,152,662	1,931,902	1,641,550	1,329,150	1,293,973	1,615,452
3,310,824	2,762,386	2,078,341	2,440,310	2,901,283	2,362,155
2,315,896	1,446,497	1,825,201	847,246	2,190,398	1,831,793
1,096,667	1,260,155	1,191,439	1,147,687	1,054,989	1,007,356
6,468,485	10,553,455	8,917,796	8,407,259	11,998,519	7,886,179
858,861	821,442	779,453	1,227,736	1,161,822	997,672
7,940,886	6,774,159	6,592,367	4,506,935	5,107,521	5,466,842
(9,376,809)	(8,355,153)	(7,506,517)	(5,774,554)	(3,946,075)	(3,459,667)
57,171,918	50,179,846	51,187,381	47,271,807	46,061,584	45,410,351
$ 159,370,400	$ 150,074,534	$ 145,294,354	$ 137,586,271	$ 143,339,727	$ 138,964,116

NORTHEAST OHIO REGIONAL SEWER DISTRICT
COMMUNITIES SERVED BY THE DISTRICT AND
ESTIMATED POPULATION SERVED
DECEMBER 31, 2018

Municipality	Estimated Service Population [1]		Municipality	Estimated Service Population [1]	
SUBDISTRICT 1					
Cleveland City	381,371				
SUBDISTRICT 2			**SUBDISTRICT 2**		
Bath Township	60		Middleburg Heights City	15,630	
Beachwood City	12,862		Moreland Hills Village	3,251	
Bedford City	-	(3)	Newburgh Heights Village	2,105	
Bedford Heights City	-	(3)	North Randall Village	1,058	
Berea City	18,754		North Royalton City	4,066	(2)
Boston Heights Village	782	(2)	Northfield Center Township	5,667	
Bratenahl Village	1,281		Northfield Village	3,535	
Brecksville City	13,215	(2)	Oakwood Village	1,613	(2)
Broadview Heights City	14,930	(2)	Olmsted Falls City	8,876	(2)
Brook Park City	18,440		Olmsted Township	8,096	(2)
Brooklyn City	10,804		Orange Village	945	(2)
Brooklyn Heights Village	1,560		Parma City	78,851	
Cleveland Heights City	45,775		Parma Heights City	20,483	
Columbia Township	2,309	(2)	Pepper Pike City	6,165	(2)
Cuyahoga Heights Village	646		Richfield Township	946	(2)
East Cleveland City	16,486		Richfield Village	3,760	(2)
Euclid City	360	(2)	Richmond Heights City	4,315	(2)
Garfield Heights City	27,874		Sagamore Hills Township	11,074	
Gates Mills Village	360	(2)	Seven Hills City	11,735	
Glenwillow Village	3	(2)	Shaker Heights City	27,974	
Highland Heights City	8,099		Solon City	148	(2)
Highland Hills Village	1,128		South Euclid City	21,335	
Hudson City	8,904	(2)	Strongsville City	25,603	(2)
Independence City	7,129		Twinsburg City	9	(2)
Lakewood City	-	(3)	Twinsburg Township	541	(2)
Linndale Village	161		University Heights City	13,796	
Lyndhurst City	13,563		Valley View Village	1,990	
Macedonia City	11,607		Walton Hills Village	2,144	
Maple Heights City	22,546		Warrensville Heights City	13,140	
Mayfield Heights City	18,640		Willoughby Hills City	-	(3)
Mayfield Village	3,338				
			Total Subdistrict 2	580,467	
Total Estimated Service Population				**961,838**	

(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.

Northeast Ohio
Regional Sewer District

3900 Euclid Avenue
Cleveland, Ohio 44115
(216) 881-6600 • neorsd.org

NORTHEAST OHIO REGIONAL SEWER DISTRICT
SEWER LARGEST CUSTOMERS OF THE DISTRICT
AS OF DECEMBER 31, 2018
and NINE YEARS PRIOR

	2018			
	CONSUMPTION MCF (1)	AMOUNT BILLED	RANK	PERCENTAGE OF OPERATING REVENUE
SUBDISTRICT 1				
Cuyahoga Metropolitan Housing Agency (2)	84,376.5	$ 7,485,783	2	2.3%
City of Cleveland Water Filtration Plants	60,706.4	7,198,192	3	2.2%
University Hospitals	19,024.8	1,624,849	5	0.5%
Cuyahoga County (2)	18,222.5	1,606,098	6	0.5%
Arcelor Mittal Steel (ISG Cleveland)	14,297.1	1,411,023	8	0.4%
Case Western Reserve University	12,045.7	1,062,959	9	0.3%
HydroChem (Inland Waters of Ohio)	4,933.4	802,733	10	0.2%
Cleveland Board of Education	7,205.1	638,483	13	0.2%
Veterans Administration Hospitals (2)	6,372.5	562,500	14	0.2%
Ferro Corporation (2)	4,878.7	429,819	16	0.1%
Cleveland Metroparks Zoo	4,024.6	400,163	17	0.1%
Sherwin Williams (2)	4,253.7	378,178	18	0.1%
Dominion Cleveland Thermal Energy Corporation	3,690.8	325,514	20	0.1%
Cleveland State University	3,428.8	303,173	21	0.1%
Cleveland Clinic (2)	3,173.2	283,324	22	0.1%
Clean Harbors	1,626.9	245,778	24	0.1%
General Electric Company	2,398.4	110,256	26	0.0%
Columbus Road Realty	-	-	-	-
Holiday Inn	-	-	-	-
Property Management Rental	-	-	-	-
MetroHealth Medical Centers	-	-	-	-
Total Subdistrict 1	254,659.1	24,868,825		7.5%
SUBDISTRICT 2				
Eaton Estates / Nagy Park (Summit County)	110,602.9	10,710,625	1	3.3%
Aluminum Corporation of America (ALCOA)	28,480.4	2,544,907	4	0.8%
NASA John H Glenn Research Center	15,778.6	1,413,822	7	0.4%
Forest City Management (2)	7,282.5	652,139	11	0.2%
Ford Motor Corporation	7,138.5	649,633	12	0.2%
Charter Steel	5,617.6	503,461	15	0.2%
Cuyahoga County Community College (2)	4,046.5	356,394	19	0.1%
Brooklyn Acres Homes (2)	2,681.0	255,046	23	0.1%
Zehman & Wolfe Management	1,435.5	127,704	25	0.0%
General Motors Corporation	-	-	-	-
The Pearl Management Company	-	-	-	-
K & D Group	-	-	-	-
Total Subdistrict 2	183,063.5	17,213,731		5.3%
Grand Total	$ 437,722.6	$ 42,082,556		12.8%

(1) One (1) MCF = one thousand cubic feet = 7,480 gallons.
(2) Amount represents Subdistrict 1 and Subdistrict 2 billings combined. Customer is listed in the Subdistrict where majority of consumption occurs.
(3) Eaton Estates /Nagy Park are included in an entire list of meter read info from Summity County. Overall the Distrct is billing Summit County more MCF with the meter read approach than what we billed with the prior master meters & Eaton/Nagy list.
Source: District accounting records and City of Cleveland Division of Water billing records.

2009			
CONSUMPTION MCF (1)	AMOUNT BILLED	RANK	PERCENTAGE OF OPERATING REVENUE
81,020.1	$ 3,730,445	1	2.2%
21,945.9	1,078,828	6	0.7%
23,572.0	1,097,940	4	0.7%
20,093.0	925,705	10	0.6%
19,872.9	735,298	11	0.4%
21,365.1	989,925	7	0.6%
3,506.7	196,485	24	0.1%
21,926.0	1,008,949	8	0.6%
7,185.8	321,747	17	0.2%
13,877.4	611,931	14	0.4%
-	-	-	-
-	-	-	-
-	-	-	-
10,212.5	468,450	15	0.3%
42,345.2	1,993,995	2	1.2%
-	-	-	0.0%
3,753.1	175,147	25	0.1%
6,379.7	286,756	19	0.2%
6,885.6	301,617	18	0.2%
4,768.5	218,417	22	0.1%
15,855.4	733,310	12	0.4%
324,564.9	14,874,945		9.0%
7,887.2	322,586	18	0.2%
25,429.1	1,035,186	7	0.6%
26,392.6	1,079,229	5	0.7%
15,472.1	695,967	13	0.4%
31,865.8	1,303,311	3	0.8%
-	-	-	-
-	-	-	-
-	-	-	-
5,796.3	242,567	21	0.1%
6,103.8	247,303	20	0.2%
5,214.9	211,434	23	0.1%
4,345.9	173,629	26	0.1%
128,507.7	5,311,212		3.2%
453,072.6	$ 20,186,157		12.2%

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

Debt by Type, In Thousands	2018	2017	2016	2015
Revenue Bond Issues				
$68,280 Series 2005 (A)	$ -	$ -	$ -	$ 13,950
$126,055 Series 2007 (B) (F) (G)	-	-	7,520	34,110
$336,930 Series 2010 (C)	336,930	336,930	336,930	336,930
$249,535 Series 2013 (D) (H)	24,730	24,730	249,535	249,535
$350,570 Series 2014A (E)	332,585	336,570	350,570	350,570
$68,460 Series 2014B (F)	65,440	68,460	68,460	68,460
$25,015 Series 2016 (G)	21,955	22,115	25,015	-
$241,595 Series 2017 (H)	241,595	241,595	-	-
Total Revenue Bond Issues	1,023,235	1,030,400	1,038,030	1,053,555
Bond Premium	48,533	53,979	59,638	66,503
Bond Discount	(20)	(22)	(26)	-
Total Revenue Bonds	1,071,748	1,084,357	1,097,642	1,120,058
Water Pollution Control Loans	595,876	515,685	490,186	497,778
Total All Debt	$ 1,667,624	$ 1,600,042	$ 1,587,828	$ 1,617,836
Number of Customer Accounts (1)	323,664	323,877	325,225	326,496
Outstanding Debt Per Customer Account	$ 5,152	$ 4,940	$ 4,882	$ 4,955
(1)For this schedule, Number of Customer Accounts is adjusted for Master Meter Communities as follows.*				
Historical Number of Customer Accounts (see pages 94 & 95)	322,574 (I)	322,799 (I)	311,441	312,837
Less Master Meter Communities	(1)	(1)	(3)	(3)
Add estimated number of customers in Master Meter Communities	1,091	1,079	13,787	13,662
Number of Customer Accounts	323,664	323,877	325,225	326,496

*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 7 to the Audited Financial Statements for December 31, 2018.
(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.

Source: District accounting records.

2014	2013	2012	2011	2010	2009
$ 20,445	$ 26,635	$ 32,525	$ 38,190	$ 43,660	$ 48,925
36,865	112,430	114,930	117,330	119,645	121,865
336,930	336,930	336,930	336,930	336,930	-
249,535	249,535	-	-	-	-
350,570	-	-	-	-	-
68,460	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
1,062,805	725,530	484,385	492,450	500,235	170,790
74,014	2,299	2,646	3,046	3,507	4,044
-	-	-	-	-	-
1,136,819	727,829	487,031	495,496	503,742	174,834
469,536	468,816	470,471	478,272	435,356	411,544
$ 1,606,355	$ 1,196,645	$ 957,502	$ 973,768	$ 939,098	$ 586,378
326,555	326,720	326,412	323,567	315,794	319,629
$ 4,919	$ 3,663	$ 2,933	$ 3,009	$ 2,974	$ 1,835
313,021	313,284	313,294	309,820	302,838	306,791
(3)	(3)	(3)	(3)	(3)	(3)
13,537	13,439	13,121	13,750	12,959	12,841
326,555	326,720	326,412	323,567	315,794	319,629

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

Year	Estimated Population Served (1)	Cuyahoga County Unemployment Rate (2)	Total Personal Income (000's) (3)	Per Capita Personal Income (3)
2009	1,285,082	9.2%	51,323,908	41,391
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%	n/a	n/a

(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.

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

NORTHEAST OHIO REGIONAL SEWER DISTRICT
Principal Employers of Cuyahoga County, Ohio
As of December 31, 2018 and 2009

	2018			2009		
Employer Name (1)	Number of Employees (1) FTE* 6-30-2018	Rank (1)	Percentage of Total County Employment (2)	Number of Employees (1) FTE* 12-31-2009	Rank (1)	Percentage of Total County Employment (2)
Cleveland Clinic Health System	35,326	1	5.30%	32,000	1	5.12%
University Hospitals	17,711	2	2.66%	12,970	3	2.08%
U.S. Office of Personnel Management	12,125	3	1.82%	13,849	2	2.22%
Progressive Corp.	9,554	4	1.43%	8,795	6	1.41%
Group Management Services Inc.	7,641	5	1.15%	6,507	9	1.04%
Cuyahoga County	7,414	6	1.11%	8,956	5	1.43%
City of Cleveland	6,828	7	1.02%	8,232	7	1.32%
Metro Health System	6,538	8	0.98%	- (3)	-	-
Cleveland Municipal School District	6,517	9	0.98%	- (3)	-	-
KeyCorp	4,959	10	0.74%	5,973	10	0.96%
Giant Eagle Inc.	-	-	-	10,319	4	1.65%
United States Postal Service	-	-	-	8,195	8	1.31%
Total	114,613		17.19%	115,796		18.54%
Total Cuyahoga County Employment (2)			666,446			625,000

* Full-Time Equivalent.

(1) Sources are *Crain's Cleveland Business* , December 2018 and December 2009. 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

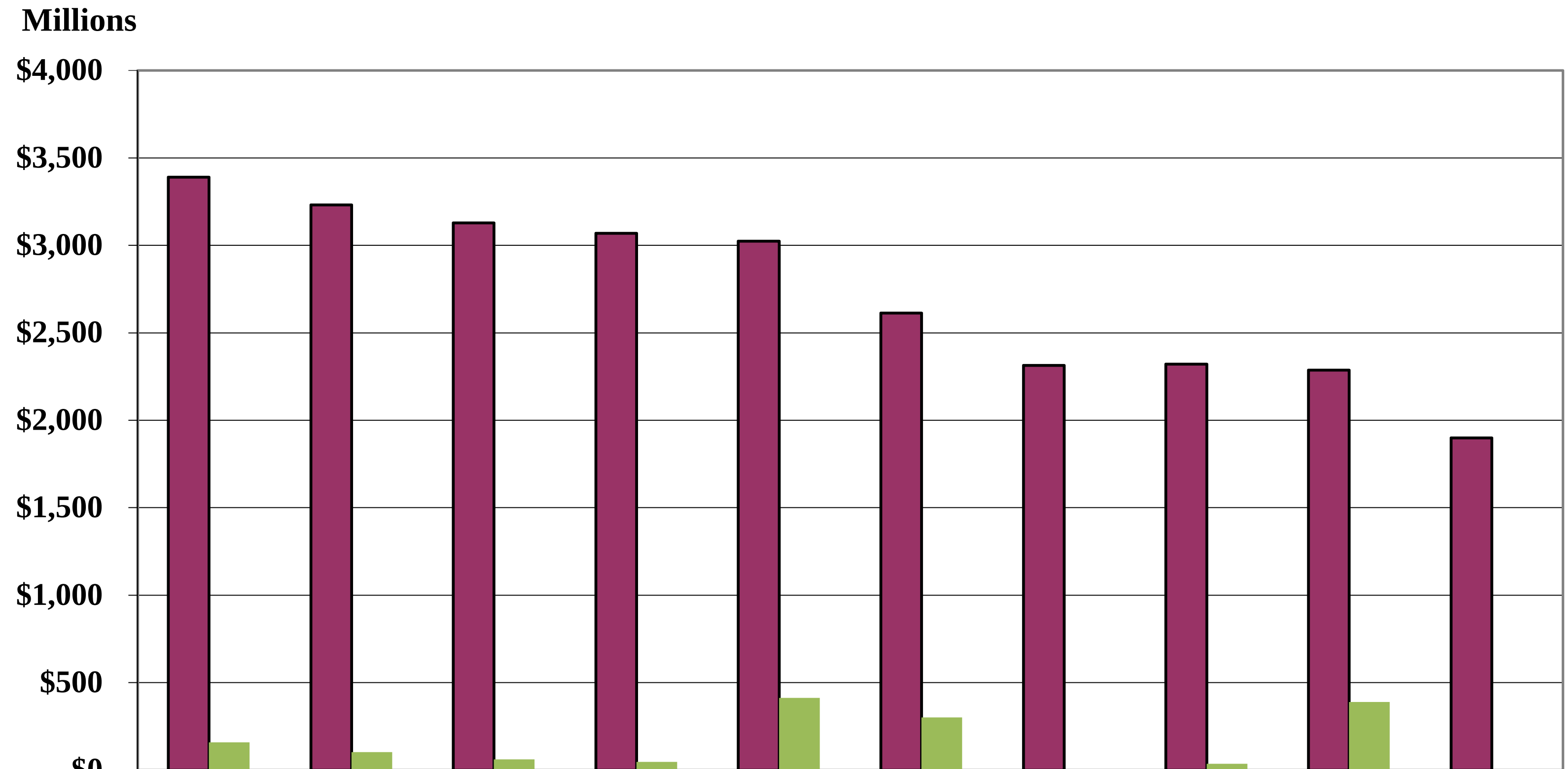
	2018	2017	2016	2015
TREATMENT PLANT FLOW				
Billions of gallons of sewage treated per plant:				
Easterly	34.2	29.9	26.3	29.4
Southerly	48.3	44.8	41.0	47.7
Westerly	9.8	8.6	9.0	9.7
Total	92.3	83.3	76.3	86.8
Total sewage treated, in MCFs (1)	12,339,572	11,136,364	10,200,535	11,604,278
MCFs billed, total District (5) (10)	3,568,979	3,757,322	3,703,466	3,665,500
STAFFING LEVELS				
Number of sewer employees:				
Plant Operations and Maintenance (4)	432	424	427	410
Engineering	63	64	66	64
Finance (6) (7)	45	43	43	43
Human Resources (3)	29	30	30	27
Information Technology	35	36	24	19
District Administration (3) (6) (8)	17	14	15	13
Legal (8)	11	10	10	8
Administration and External Affairs (7)	38	41	33	27
Watershed Programs (4)	82	105	94	83
Total	752	767	742	694
Number of stormwater employees:				
Stormwater (9)	36	26	8	-
Total District employees	788	793	750	694
Budgeted employees, total District	824	809	773	761

(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.

Source: Various District records.

2014	2013	2012	2011	2010	2009
32.2	31.7	32.9	41.9	30.9	31.2
47.2	44.0	39.1	51.5	39.2	39.1
10.3	9.9	9.9	12.6	9.0	10.1
89.7	85.6	81.9	106.0	79.1	80.4
11,991,979	11,443,850	10,949,198	14,171,123	10,574,866	10,748,663
3,739,178	3,709,188	3,895,816	4,096,885	4,195,507	4,267,959
363	344	339	352	357	353
61	61	61	52	54	56
44	43	39	41	47	47
16	16	15	17	17	19
22	18	19	19	20	21
78	69	66	54	50	47
9	12	11	10	14	13
38	32	28	25	18	16
77	78	70	72	63	62
708	673	648	642	640	634
-	-	-	-	-	-
708	673	648	642	640	634
730	719	693	680	679	668

NORTHEAST OHIO REGIONAL SEWER DISTRICT
CUMULATIVE ASSET GROWTH
LAST TEN YEARS



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
TOTAL ASSET	$3,389	$3,231	$3,129	$3,069	$3,024	$2,613	$2,314	$2,321	$2,287	$1,898
YR INCREASES (DECREASES)	$158	$102	$60	$45	$411	$299	($7)	$34	$389	($1)

Northeast Ohio Regional Sewer District

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NORTHEAST OHIO REGIONAL SEWER DISTRICT
CAPITAL ASSET STATISTICS
LAST TEN YEARS

	2018	2017	2016	2015
Number of Buildings				
Operations				
Southerly Plant	45	45	44	43
Easterly Plant	22	21	21	20
Westerly Plant	17	17	17	17
Outlying Pump Buildings	9	7	6	6
Total Operations	93	90	88	86
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	95	93	91
Miles of Interceptor Sewers Installed Annually*	3.53	-	0.20	1.4
Number of Outlying Systems				
Sewage Collection System				
Interceptor Sewers and Tunnels	22	21	21	21
Inter-Community Relief Sewers	30	30	30	30
Automated Regulators	31	32	32	32
Pumping Stations	13	10	9	9
Force Mains	5	5	5	5
Total Sewage Collection System	101	98	97	97
Support Facilities				
Floatables Control Sites	10	10	10	10
Biofilter Odor Control Sites	8	8	8	8
Rain Gauge Sites	30	29	28	28
Lakeview Dam	1	1	1	1
Total Support Facilities	49	48	47	47
Total Outlying Systems	150	146	144	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				
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.

2014	2013	2012	2011	2010	2009
42	42	40	39	39	39
19	19	18	18	18	18
17	16	16	16	16	16
7	7	7	7	7	5
85	84	81	80	80	78
1	1	1	1	1	1
4	4	4	4	4	4
5	5	5	5	5	5
90	89	86	85	85	83
4.5	0.25	2.87	5.55	3.95	0.4
21	21	21	21	21	21
30	29	28	26	26	25
31	25	25	25	25	25
9	10	10	10	10	8
5	6	6	6	6	5
96	91	90	88	88	84
10	10	10	10	10	10
8	8	8	8	8	8
28	25	25	25	25	25
1	1	1	1	1	1
47	44	44	44	44	44
143	135	134	132	132	128
311.2	311.2	311.2	311.2	311.2	311.2
92.6	92.6	92.6	92.6	92.6	77.7
13.4	13.4	13.4	13.4	13.4	14.5
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	420.7

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CONTINUING DISCLOSURE REQUIREMENTS

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

	2018	2017	2016	2015
Sewage Accounts:				
Subdistrict 1				
Cleveland (2)	119,325	120,031	122,204	123,722
Subdistrict 2				
Master Meter - Suburbs (1) (2)	1	1	3	3
Direct Service - Suburbs (2)	203,248	202,767	189,234	189,112
Subtotal	203,249	202,768	189,237	189,115
Total Sewage Accounts	322,574	322,799	311,441	312,837
Stormwater Only Accounts (3)	17,268	17,296	20,602	-
Total Customers	339,842	340,095	332,043	312,837

(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.

Source: District accounting records.

2014	2013	2012	2011	2010	2009
124,288	125,422	126,357	125,832	121,009	122,201
3	3	3	3	3	3
188,730	187,859	186,934	183,985	181,826	184,587
188,733	187,862	186,937	183,988	181,829	184,590
313,021	313,284	313,294	309,820	302,838	306,791
-	-	-	-	-	-
313,021	313,284	313,294	309,820	302,838	306,791

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

	2018	2017 (3)	2016	2015
Subdistrict 1				
Cleveland	1,622,406	1,701,704	1,684,932	1,668,505
Subdistrict 2				
Direct Service - Suburbs (2)	1,936,856	2,046,806	1,921,167	1,884,506
Master Meter - Suburbs (1)	9,822	8,812	97,367	112,489
Subtotal	1,946,678	2,055,618	2,018,534	1,996,995
Total Service Area	3,569,084	3,757,322	3,703,466	3,665,500

(1) For years 2009-2011, 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.

2014	2013	2012	2011	2010		2009
1,715,359	1,706,438	1,781,276	1,881,996	1,946,380	(2)	1,915,736
1,892,128	1,859,247	1,977,996	2,005,569	2,078,834	(2)	2,189,464
131,691	143,503	136,544	209,320	170,293		162,759
2,023,819	2,002,750	2,114,540	2,214,889	2,249,127		2,352,223
3,739,178	3,709,188	3,895,816	4,096,885	4,195,507		4,267,959

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

(In Thousands of Dollars)

	2018	2017 (3)	2016 (3)	2015 (3)
Sewer Operating Revenues, Net	$ 326,059	$ 299,380	$ 286,783	$ 259,683
Non-Operating Sewer Revenues	5,138	3,315	3,397	1,353
Total Revenues	331,197	302,695	290,180	261,036
Sewer Operating Expenses (Exclusive of depreciation)	136,955	131,755	118,992	104,480
Transfer to Rate Stabilization Account	-	-	-	6,000
Total Expenses	136,955	131,755	118,992	110,480
Net Revenues Available for Debt Service	$ 194,242	$ 170,940	$ 171,188	$ 150,556
Total Revenue Bond Debt Service (1),(2)	$ 51,163	$ 62,907	$ 63,428	$ 42,425
Coverage on Revenue Bond Debt Service	3.80	2.72	2.70	3.55
Total All Debt Service (1)	$ 95,231	$ 107,612	$ 111,612	$ 94,103
Coverage on Total Debt Service	2.04	1.59	1.53	1.60

(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, 2018 were:

	2018	2017	2016	2015
Revenue Bond Issues and Debt Service				
$68,280 Series 2005 (A)	$ -	$ -	$ 14,648	$ 7,517
$126,055 Series 2007 (B) (F) (H)	-	338	3,373	4,457
$336,930 Series 2010 (C) (G)	13,335	13,360	13,367	13,363
$249,535 Series 2013 (D) (I)	952	12,172	12,172	6,086
$350,570 Series 2014A (E)	19,485	30,182	16,182	8,091
$68,460 Series 2014B (F)	6,225	3,205	3,205	2,911
$25,015 Series 2016 (H)	823	3,650	481	-
$241,595 Series 2017 (I)	10,343	-	-	-
Total Revenue Bond Issues and Debt Service	51,163	62,907	63,428	42,425
WPCLF Debt Service	44,068	44,705	48,184	51,678
Total All Debt Service	$ 95,231	$ 107,612	$ 111,612	$ 94,103

(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.

(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.

Source: District accounting records.

2014	2013	2012	2011	2010	2009
$ 239,185	$ 209,790	$ 187,241	$ 172,722	$ 166,851	$ 164,776
1,290	1,462	1,939	3,674	4,131	3,366
240,475	211,252	189,180	176,396	170,982	168,142
102,198	99,895	94,107	90,314	97,278	93,554
6,000	-	-	3,000	-	3,000
108,198	99,895	94,107	93,314	97,278	96,554
$ 132,277	$ 111,357	$ 95,073	$ 83,082	$ 73,704	$ 71,588
$ 28,774	$ 28,579	$ 15,372	$ 15,370	$ 15,375	$ 15,373
4.60	3.90	6.18	5.41	4.79	4.66
$ 78,180	$ 78,818	$ 64,473	$ 59,974	$ 60,821	$ 59,430
1.69	1.41	1.47	1.39	1.21	1.20

2014	2013	2012	2011	2010	2009
$ 7,522	$ 7,516	$ 7,518	$ 7,514	$ 7,520	$ 7,517
7,858	7,858	7,854	7,856	7,855	7,856
13,394	13,205	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
28,774	28,579	15,372	15,370	15,375	15,373
49,406	50,239	49,101	44,604	45,446	44,057
$ 78,180	$ 78,818	$ 64,473	$ 59,974	$ 60,821	$ 59,430

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

Fiscal Years During Which Rates Were Effective	Standard Fixed Fee (3)	Homestead Fixed Fee (4)	SUBDISTRICT 1				SUBDISTRICT 2			
			Standard		Homestead (2)		Standard		Homestead (2)	
			Rate (1)	% Change	Rate (1)	% Change	Rate (1)	% Change	Rate (1)	% Change
2009	$ -	$ -	$ 37.15	9.7	$ 24.95	9.7	$ 40.90	8.1	$ 27.45	8.1
2010	-	-	40.75	9.7	27.35	9.6	44.25	8.2	29.70	8.2
2011	-	-	44.75	9.8	30.05	9.9	48.00	8.5	32.25	8.6
2012	5.85	-	49.55	10.7	29.75	-1.0	52.55	9.5	31.75	-1.6
2013	6.30	-	55.45	11.9	33.35	12.1	58.15	10.7	35.15	10.7
2014	6.60	-	62.15	12.1	37.35	12.0	64.55	11.0	38.95	10.8
2015	6.90	-	69.65	12.1	41.85	12.0	71.75	11.2	43.25	11.0
2016	7.20	-	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

(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 loading determined by analysis or otherwise.

Minimum Quarterly Billing

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

Source: District accounting records.

NORTHEAST OHIO REGIONAL SEWER DISTRICT
STORMWATER FEE RATES
RATES AS OF DECEMBER 31, 2018

Type of property	Tier Type	Impervious surface area (sq. ft.)*	2018 (1)	2017 (1)	2016 (1)
Residential	Tier 1	Less than 2,000	$3.09	$3.09	$3.09
	Tier 2/Base	2,000-3,999	$5.15	$5.15	$5.15
	Tier 3	4,000 or more	$9.27	$9.27	$9.27
	Homestead/Affordability	Any size	$2.07	$2.07	$2.07
Non-residential	All	Per ERU, or 3,000 square feet	$5.15	$5.15	$5.15
	Educational Economically Disadvantaged (2)	Per ERU, or 3,000 square feet	$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.

(2) Educational Economically Disadvantaged Stormwater Fee – The Educational Economically Disadvantaged Stormwater Fee may be available to all public and private primary, elementary, and secondary schools, school districts, or school systems under the control of a common entity that are recognized in the State of Ohio and can demonstrate that 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.).

Source: District accounting records.

NORTHEAST OHIO REGIONAL SEWER DISTRICT
CAPITAL IMPROVEMENT PROGRAM
USES AND SOURCES OF FUNDS
FOR THE YEARS ENDING DECEMBER 31, 2019 THROUGH 2028
(In Thousands of Dollars)

	2019	2020	2021	2022	2023
USES OF FUNDS					
Sewage Treatment Plant Improvements					
Westerly	$ 2,776,816	$ 11,427,782	$ 516,295	$ 1,992,961	$ 2,081,260
Southerly	17,538,603	17,845,700	13,758,673	22,027,142	14,079,676
Easterly	2,853,992	5,649,479	6,976,169	3,106,573	11,924,782
Sub-Total	23,169,411	34,922,961	21,251,137	27,126,676	28,085,718
Interceptors/Rehabilitation	1,696,525	9,214,709	8,730,709	3,927,735	18,566,472
Combined Sewer Overflow Control Program	211,755,983	143,443,934	187,584,584	236,090,252	207,571,872
Districtwide Building Improvments and Other Improvements	37,274,905	38,536,624	26,253,179	42,701,049	23,346,621
Information Technology and Other Minor Equipment	17,480,368	16,685,619	17,581,615	18,536,924	19,556,298
Total	$ 291,377,192	$ 242,803,847	$ 261,401,224	$ 328,382,636	$ 297,126,981
SOURCES OF FUNDS					
WPCLF Loans (1)	$ 186,149,000	$ 141,604,000	$ 167,300,000	$ 232,907,000	$ 199,621,000
Internally Generated Funds/Reserves	105,228,192	101,199,847	94,101,224	95,475,636	97,505,981
Total	$ 291,377,192	$ 242,803,847	$ 261,401,224	$ 328,382,636	$ 297,126,981

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

2024	2025	2026	2027	2028	TOTAL
$ 2,149,571	$ 2,208,009	$ 2,274,249	$ 2,342,477	$ 2,419,361	$ 30,188,781
38,224,778	51,386,127	28,215,571	20,467,914	8,072,528	231,616,712
4,556,108	2,209,247	1,762,869	1,698,975	1,754,739	42,492,933
44,930,457	55,803,383	32,252,689	24,509,366	12,246,628	304,298,426
24,074,462	14,978,697	5,750,506	19,355,327	21,270,515	127,565,657
129,929,084	216,515,394	192,769,129	64,354,003	59,889,900	1,649,904,135
26,341,791	27,437,332	17,583,036	15,774,378	17,455,832	272,704,747
20,644,959	21,808,645	23,053,622	24,386,901	25,815,949	205,550,900
$ 245,920,753	$ 336,543,451	$ 271,408,982	$ 148,379,975	$ 136,678,824	$ 2,560,023,865
$ 139,926,000	$ 204,376,000	$ 155,445,000	$ 41,339,382	$ 35,031,920	$ 1,503,699,302
105,994,753	132,167,451	115,963,982	107,040,593	101,646,904	1,056,324,563
$ 245,920,753	$ 336,543,451	$ 271,408,982	$ 148,379,975	$ 136,678,824	$ 2,560,023,865

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Prepared by the Department of Finance

Project Manager: Majlinda Marku, Manager of Accounting, MBA

Special thanks to the following Finance staff for their contributions to make this document possible:

Kenneth J. Duplay, Chief Financial Officer, CPA, CMA
Brandon Knittle, Manager of Debt & Treasury, MBA
Michael McGing, Manager of Billing Services and Systems
Shola Ojo, Manager of Finance and Compliance, CPA
Robert Radd, Senior Financial Analyst
Kandis Morrissette, Financial Analyst
Brandi Hazeldine, Senior Accountant, CPA
Jenny Brna, Accountant, CPA
Jamee Thompson, Budget Analyst
Maridah Ahmad, Senior Finance Administrator
Vanessa Byrd, Accounting Clerk

Other Department Contributors:

John C. Gonzalez, Manager of Communications
Monica Day, GIS Supervisor

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