THE METROPOLITAN ST. LOUIS SEWER DISTRICT

Maline Creek Storage Facility Construction

MSD

ST. LOUIS, MISSOURI

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEARS ENDED JUNE 30, 2017 and 2016

THE METROPOLITAN ST. LOUIS
SEWER DISTRICT
ST. LOUIS, MISSOURI

COMPREHENSIVE ANNUAL
FINANCIAL REPORT
FOR THE FISCAL YEARS ENDED JUNE 30, 2017 AND 2016

Report Prepared And Submitted By The
Department of Finance

Marion M. Gee
Director Of Finance

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Introductory Section

Metropolitan St. Louis Sewer District

Vision Statement

Quality Service Always

Mission Statement

To protect the public's health, safety, and water environment by responsibly providing wastewater and stormwater management

Values

Integrity
Teamwork
Excellence and Innovation
The District Employees
Customer Satisfaction

Mission, Vision, Value statements are important elements of a strategic business plan. The Mission statement keeps the District focused on its essential activity, the Vision statement points to its ideal purpose, and the Value statement conveys the principles that must shape our actions.

Metropolitan St. Louis Sewer District

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October 17, 2017

The Board of Trustees
The Metropolitan St. Louis Sewer District

The Comprehensive Annual Financial Report ("CAFR") of The Metropolitan St. Louis Sewer District ("MSD" or the "District") for the fiscal year ended June 30, 2017, is submitted herewith. The District's Finance Department prepared this report. The District is responsible for the accuracy of the data and the completeness and fairness of the presentation of the financial statements and other information presented herein. We believe the presentation is accurate in all material respects and includes all disclosures necessary to enable the reader to gain a reasonable understanding of the District's financial activities. In the CAFR, the District's financial activities are measured on a single enterprise fund basis where all funds of the District and its sub-districts are consolidated.

The District's CAFR includes an Introductory Section, a Financial Section, and a Statistical Section. The Introductory Section includes this transmittal letter, lists of the District's Board of Trustees, Rate Commission Chair, members of the Civil Service Commission, management staff, and an organization chart as of June 30, 2017. The Financial Section includes the independent auditors' report, management's discussion and analysis, and the District's basic financial statements. The Statistical Section includes financial, economic, and demographic information, generally presented on a multi-year basis.

The CAFR includes all funds of the District. The operations of these funds, as reflected in the financial statements, are under the control of the District's governing body. The District has determined there were no other agencies or entities that met the established criteria for inclusion in the reporting entity.

Organization

MSD was created in 1954 to provide a metropolitan-wide sewer system to serve the City of St. Louis and most of the more heavily populated areas of St. Louis County. Before MSD's creation, the City of St. Louis, various municipalities, and private sewer companies provided sewer service that primarily included only collecting and transporting sewage from small geographic areas to nearby rivers and streams with little or no treatment. Most of the municipalities or private sewer companies serving the area did not have the jurisdictional authority or financial resources needed to eliminate health hazards from untreated sewage.

When the District began operations, it took over the publicly owned wastewater and stormwater drainage facilities within its jurisdiction and began the construction of an extensive system of collector and interceptor sewers and treatment facilities. In 1977, voters approved the District's annexation of a 270 square mile area of the lower Missouri River and lower Meramec River watersheds. The District purchased the Fee Fee Trunk Sewer Company and the Missouri Bottoms Sewer Company in 1978. MSD has since acquired other investor-owned or municipally operated systems.

The District's service area now encompasses 520 square miles including all 66 square miles of the City of St. Louis and 454 square miles of St. Louis County. The current population served by the District is approximately 1.3 million.

MSD is organized pursuant to Article VI, Section 30 of the Missouri State Constitution that empowers the people of St. Louis County and the City of St. Louis "to establish a metropolitan district for functional administration of services common to the area." MSD is the only district established pursuant to that section of the Missouri State Constitution.

The Charter of MSD ("Plan"), approved by voters in 1954 and amended in 2000 and 2012, established the District. The Plan describes the District as "a body corporate, a municipal corporation, and a political subdivision of the state." As a political subdivision of the state, MSD is comparable to a county or city, such as St. Louis County or the City of St. Louis.

The Plan established the governing body of the District as a six-member Board of Trustees ("Board") with three members appointed by the Mayor of St. Louis and three members appointed by the St. Louis County Executive. No more than two trustees appointed from the City or County can be affiliated with the same political party.

Unlike a corporation's board of directors that is responsible solely to the stockholders who choose to invest in the corporation, MSD's Board members are trustees of public property and public funds. They are responsible to all citizens within the District.

According to the Plan, the Board enacts District ordinances, determines policies, and appoints the Executive Director, the Secretary-Treasurer, and the Internal Auditor. The Executive Director appoints all other District officials. Among its duties, the Board makes all appropriations, approves contracts for improvements, and engages an accounting firm to perform the annual independent audit of the District.

The Plan prescribes other duties of the Board and grants numerous broad powers, subject to federal and state laws, to the District and the Board of Trustees. Among other things, the Plan outlines the following requirements or provisions:

- Requires that MSD operate with a balanced budget;
- Details how MSD can tax property and requires an annual public hearing on all taxes levied by the District;
- Details how MSD can establish user charges;
- Requires MSD to establish civil service rules and regulations governed by a Civil Service Commission;
- Provides how the original boundaries of the District may be extended to include any area in St. Louis County; and
- Requires MSD to approve all plans and designs for proposed construction, alteration, or reconstruction of sewer or drainage facilities within the District's boundaries.

The District is also governed by the Missouri State Constitution and various federal and state laws that among other requirements mandate the following:

- MSD must hold permits for all sanitary discharges. These permits require a minimum of secondary treatment;
- MSD must provide wastewater treatment in an area-wide manner to qualify for federal and state grants;
- MSD must operate, maintain, and replace facilities to provide proper wastewater treatment or be subject to penalties and fines; and
- MSD must set user charge rates in compliance with the Federal Clean Water Act. These rates must be submitted to the Missouri Department of Natural Resources to receive future construction grants and to avoid the possibility of refunding past grants.

During fiscal 2017 the primary source of funding for the operation and maintenance of MSD's wastewater system was a user charge averaging $535.08 per year or $44.59 per month for a single-family residence. The District's charges for residential wastewater service are tied to the amount of measured water usage during a winter quarter. For residential properties without water meters, the charges are based on housing attributes (such as the number of rooms, baths, and toilets) that correlate to water usage. That methodology is the same billing methodology used by the City of St. Louis Water Division for their non-metered properties. Multi-family residential and non-residential rates are proportionate to the single-family charge and are based on water consumption and the strength of the discharge.

Prior to fiscal year 2017, the operation and maintenance of the District's stormwater system was funded by a combination of property taxes and flat fee billing of 24¢ per month for residential and commercial properties and 18¢ per month per unit for multi-unit properties. On April 5, 2016, 62% of voters in MSD's service area approved Proposition S which placed all MSD customers under the same property tax rates to fund stormwater services. The flat fee billings were eliminated.

MSD also receives some federal, state, and local grants to help defray the cost of constructing sewage treatment and drainage facilities and improvements. The District also charges fees for plan review, permits, construction inspection of new system development, and special discharges. The District charges a uniform connection fee in all service areas.

The District, itself, may issue general obligation bonds and revenue bonds to finance the cost of improvements and extensions to the sewer system. The District also may issue, on behalf of each of its subdistricts, general obligation bonds, revenue bonds, or special assessment bonds.

Major Initiatives Affecting The Financial Resources Of The District

In June 2007 the District was sued by the Department of Justice on behalf of the United States Environmental Protection Agency ("EPA") and the Missouri Department of Natural Resources ("DNR") for various alleged violations of the Clean Water Act. The Missouri Coalition for the Environment joined the suit as an intervener in August 2007. After a lengthy mediation, a Consent Decree ("CD") was entered by the Federal Court on April 27, 2012. This entry resolved all alleged violations. Compliance with the CD requires the District to implement a multi-decade, multi-billion dollar capital improvement program and rehabilitate significant portions of the existing wastewater sewer system. This effort will continue to be funded by a combination of rate increases and issuance of additional debt based on the completion of milestones defined in the CD.

Integral to helping MSD's rate payers understand the Consent Decree is MSD's initiation of Project Clear. MSD Project Clear is a long-term effort by MSD, undertaken as part of the Consent Decree agreement with the U.S. Environmental Protection Agency and the Missouri Coalition for the Environment. Project Clear's aims are to:

- Improve water quality for everyone;
- Solve problems for some of our customers created by the very nature and design of St. Louis' wastewater system, and
- Provide clear, up-to-date information to the public about Consent Decree activities.

MSD Project Clear focuses on three categories of work: Get the rain out; Repair and maintain; and Build system improvements. Get the rain out focuses on preventing excess stormwater from entering the sewer system through a variety of project types, including downspout disconnections, and rainscaping. Repair and maintain continues the work MSD has done to repair, maintain, and renew the existing sewer system, on a faster timeline. Build system improvements involves new construction of wastewater management structures, including deep underground tunnels and above-ground storage tanks.

In late April 2017 and continuing into the first week of May, the District received up to 11 inches of rain in portions of its service area. The Missouri and Mississippi Rivers reached major flood levels; however, neither river exceeded the protection levels provided by levees or flood walls. The Meramec River also experienced record flooding which caused water levels to exceed levee heights. The District's wastewater treatment plants sustained minor damages during this rain event; however, sixteen pump stations were damaged. MSD received 1,750 customer calls resulting in approximately 800 water backup claims with a reserve of approximately $1.3 million. Total costs to protect the District's facilities during the rain event or to make repairs afterwards are estimated at approximately $1.5 million. The District has submitted applications to the Federal Emergency Management Agency to recover a portion of this cost.

The Rate Commission was established in the District's Plan by amendment in 2000. Beginning in 2002, the District began submitting rate increase proposals to the MSD Rate Commission to fund its operations and multi-decade capital infrastructure improvement program. The District submits rate increase proposals to the Rate Commission as needed in accordance with the Plan.

The District submitted a rate change proposal to the MSD Rate Commission on February 26, 2015. The proposal recommended an increase in MSD's wastewater rates in order to adequately fund the work required by the Consent Decree. The proposal set rates for the District for a four-year period which covered fiscal year 2017 through fiscal year 2020. The proposal also recommended the establishment of the aforementioned District-wide tax structure to replace the multi-layered taxes previously assessed on the real estate value of our customers' property. These taxes have traditionally been used to fund stormwater services, including operations, maintenance, very limited capital projects, and regulatory compliance. The Rate Commission's recommendation to the District's proposal was received by the Board on August 5, 2015. On October 8, 2015, the Rate Commission's recommendation was adopted by the Board of Trustees.

Since February 2004, the voters of St. Louis have authorized the District to issue a total of $2.6 billion in wastewater revenue bonds. As of June 30, 2017, the District has issued $1.7 billion of the total authorization. The District's long-term wastewater capital improvement program will continue to be funded through a combination of additional bonds and wastewater rate increases.

In 2013, MSD completed a Disparity Study to identify any disparities in the District's expenditure of public funds when compared to the availability of minority and women owned firms. The study also examined the number of minorities and women working on MSD projects compared to the racial and gender composition of workers available to work on MSD projects. Procurement and contractual changes based on the study's findings were put into place in August 2013.

The Disparity Study also made recommendations for other activities the District should consider as part of a successful Diversity Program.

To help implement some of the recommendations, MSD developed a Community Benefits Agreement ("CBA"). A CBA is a formal agreement between MSD and community organizations that establishes a framework for addressing issues in workforce training, business development, and other areas that often act as obstacles in developing a diverse labor pool and contracting community. (In short, it's one thing to have inclusion goals, but it's another to have a program that helps develop the capacity to meet those goals.) The CBA will support the development of initiatives that address these issues, both in terms of workforce and business ownership. To our knowledge, the CBA is the only one of its kind in the St. Louis region.

Operations

The Executive Director and his staff administer the operation and maintenance of the District's collection and treatment systems. The District's sanitary, stormwater, and combined sewer collection system includes more than 9,400 miles of pipe and channel and will grow larger over the long term due to new development. Some years may actually see a reduction in total miles of pipe. This is due to the replacement of inefficiently placed pipe with shorter, more direct lines of pipe. The District's responsibilities for stormwater drainage range from cleaning and maintaining street inlets to operating and maintaining the floodwall pump stations along the Mississippi River.

MSD currently operates seven wastewater treatment facilities. These facilities treated an average flow of 328.9 million gallons per day ("MGD") in fiscal 2017 compared to 335.2 MGD in fiscal 2016. The design capacity and average flow, by watershed, in MGD was as follows in fiscal 2017:

MAJOR WATERSHED	LEVEL OF TREATMENT	NUMBER OF FACILITIES	DESIGN CAPACITY (MGD)	AVERAGE FLOW FISCAL 2017 (MGD)
Mississippi River	Secondary	Two	472.00	245.4
Missouri River	Secondary	Two	78.00	50.7
Meramec River	Secondary	Three	42.75	32.8
Total		Seven	592.75	328.9

In addition to construction initiated by the District to protect the public's health and property from raw sewage and flooding, the District also provides various engineering-related design review and inspection services for the construction of sanitary and stormwater sewers by individuals, businesses, and municipalities in the community.

Economic Conditions In The St. Louis Metropolitan Area

As a rule, the District's major revenue sources do not fluctuate with the local and national economy as much as local governments that depend on sales or income taxes for their major sources of revenue. The combined unemployment rate for the City of St. Louis and St. Louis County was 3.9 percent in June 2017 and lower than the national unemployment rate of 4.4 percent for the same time period.

MSD has its own internal barometers for measuring economic development within the District. These are listed below for fiscal 2017 and 2016:

	2017	**2016**
Sewer Plan Reviews:		
Number of Plans Approved	523	613
Number of Miles of Sewers	34	38
Sewer Construction Permits:		
Number of Permits Issued	3,740	4,546
Number of Miles of Sewers	24	30
Customer Connections:		
Number of Connection Permits Issued	1,891	2,165
Connection Fee Revenue (in millions)	$2.0	$1.7
Value of Sewers Dedicated to MSD by Developers (in millions)	$6.8	$11.3

Over the years, the St. Louis economy has undergone a transformation from reliance on traditional manufacturing industries to those industries based on advanced technology and services. The St. Louis area is a center for health care, biotechnology, banking, finance, transportation, tourism, and education and has a strong and diverse manufacturing economy. The area has an abundance of energy, water, and sewerage facilities and can sustain future economic growth.

Financial Information

Proprietary Operations. The current financial condition of MSD remains stable. The District realized a net operating income of $58.4 million in fiscal 2017 compared to a net operating income of $46.8 million the prior year. The increase in operating revenues of $11.6 million is explained by an increase in sewer service revenue as a result of rate increases, in conjunction with a lower provision for doubtful sewer service charges (bad debt), offset by a reduction related to the insurance recoveries recorded in fiscal 2016. Operating expenses increased $2.0 million due to an increase in annual pension expense offset by a reduction in water backup claims primarily related to the flood that occurred in fiscal 2016. A more in-depth analysis of the District's financial position and the magnitude of the capital improvement and replacement program ("CIRP") is provided in the Management's Discussion and Analysis section that appears later in this report.

Budgetary Controls. The District's Plan requires MSD to submit a proposed budget to the Board by March 15th each year. After Board review, a final budget is approved in June. The District's Plan also requires MSD to maintain budgetary controls and to adopt a balanced budget. The objective of these budgetary controls is to ensure compliance with legal provisions embodied in the appropriation process approved by the Board. The annual appropriated budget includes activities of the District's operating and debt service funds. The Board adopts ordinances to appropriate funds for capital improvement expenditures at the time of the contract award and acceptance of any grant offers.

Budgetary control is by Division and major expenditure category within the General Fund, each Debt Service Fund, and each capital improvement contract. The District utilizes an encumbrance accounting system in conjunction with internal variance and projection analysis to maintain budgetary control. Certain encumbrances carry over from one year to the next as approved by the Board during the budget process.

Monthly and year-end financial reports are prepared in accordance with United States generally accepted accounting principles for Enterprise Funds. Adjustments are made to the accounting records, where necessary, to reflect the full accrual method of accounting. Under the full accrual method of accounting, revenues are recognized when earned and expenses are recorded as liabilities when incurred. Encumbrances and unearned capital and operating grants are eliminated under the full accrual method of accounting. These amounts are disclosed as commitments in the notes to financial statements.

Cash Management. In compliance with its Plan, the District invests temporarily idle funds in cash, cash equivalents and investments such as collateralized certificates of deposit, collateralized repurchase agreements, obligations of any agency of the United States, and United States Treasury instruments. The District utilizes competitive bidding for investment purchases and monitors market conditions daily.

Risk Management. In-house staff and consultants jointly conduct risk management activities. MSD maintains third-party commercial insurance coverage for various risks while self-insuring for other risks and liabilities at levels customary for similar enterprises. The District maintains replacement cost property and casualty insurance with a policy limit of $1.25 billion on certain facilities and equipment that have an estimated replacement cost of $1.5 billion. The District assumes the risk of loss (including payment of water backup claims to its customers) on the majority of its underground pumping facilities and collection system. MSD is one of the few sewer districts in the country known to provide water backup claim coverage to its customers. The underground pumping facility and collection system assets have an estimated replacement cost of $9.9 billion. To minimize exposure to loss, the District inspects its facilities regularly and performs preventative maintenance on them.

MSD maintains automobile, general liability and excess liability insurance. The District is self-insured for workers' compensation and funds those costs through annual appropriations from the District's general insurance fund. The District maintains reinsurance for workers' compensation liabilities in excess of specified limits up to the statutory limit. Risk control activities include using a third-party claims administrator, maintaining a computerized claim tracking system, and annually reevaluating medical insurance claims and health benefit costs. The District also has programs designed to promote safety in the workplace and employee wellness.

The District provides group medical coverage for its employees and offers dependent medical coverage on a contributory basis through a self-insured plan. Effective February 1, 2014, the District maintained stop loss coverage for specific claims exceeding $175,000 per year and for total annual claims greater than 125 percent of the annual claims estimate. The District provides its employees with contributory group dental insurance coverage and non-contributory life insurance and contributory optional life insurance coverage. The District also contributes $100 every fiscal year, up to a maximum of $300, to a vision care program for employees. Effective July 1, 2013, spouses were eligible to use the benefits; effective July 1, 2016, dependent children up to age 26 were eligible to use the benefits; however, the amount could not exceed the maximum amount of $300. The District reevaluates insurance coverage and providers annually.

For most construction projects, insurance is obtained by the individual contractor and included in the contract price.

Internal Controls. District Management is responsible for designing, establishing, and maintaining an internal control system that protects District assets from loss, theft, or misuse and ensures that adequate accounting data is compiled to prepare financial statements in conformity with United States generally accepted accounting principles. Internal control systems are designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the evaluation of costs and benefits requires estimates and judgments by management. The District's internal control system is subject to periodic evaluation by Management, the Board and the District's independent accountants.

Other Information

Audit Requirements. The District's Plan requires an annual audit by independent certified public accountants. The District's CAFR includes a report on the District's financial statements by the accounting firm of CliftonLarsonAllen LLP.

Besides meeting the requirements set forth in the Plan, the annual audit is also designed to meet the requirements of the 2013 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards ("Uniform Guidance") that was issued by the Office of Management and Budget ("OMB"). A Single Audit Report will be issued for the year ended June 30, 2017.

The financial statements of The Metropolitan St. Louis Sewer District Employees' Pension Plan, The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust and The Metropolitan St. Louis Sewer District Defined Contribution Plan are also audited annually. These audit reports were issued for the periods ended December 31, 2016 and 2015 and are available to interested parties upon request.

Awards. The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to MSD for its CAFR for the fiscal year ended June 30, 2016. The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards for preparation of state and local government financial reports.

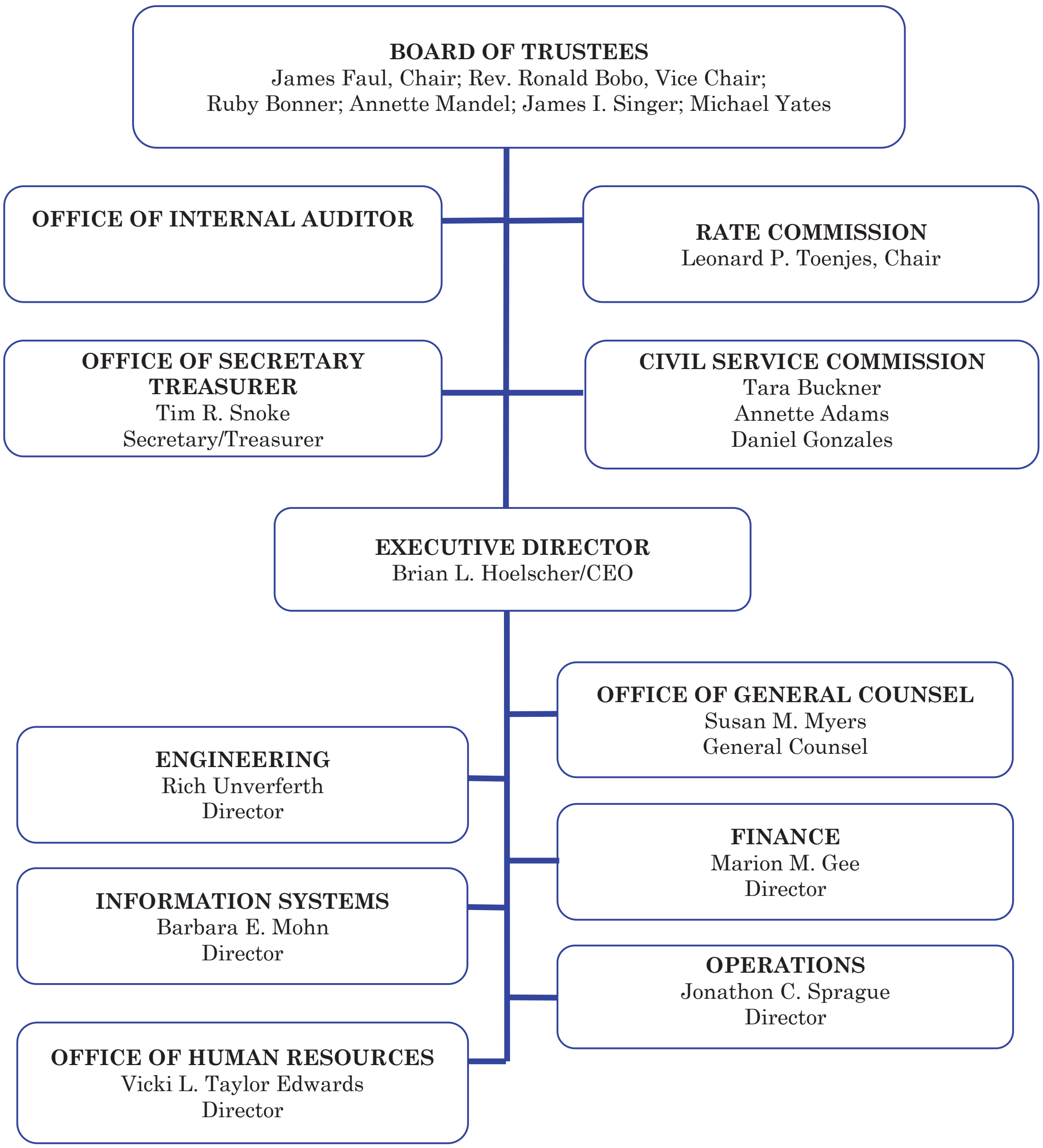
To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, the contents of which conform to program standards. The CAFR must satisfy both U.S. generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for one year only. The District has received a Certificate of Achievement for the last twenty-nine consecutive years. We believe the current CAFR continues to conform to the GFOA's high standards, as reflected in the Certificate of Achievement program requirements, and are submitting it again this year for consideration.

The District also received the GFOA's Distinguished Budget Presentation award for its fiscal 2017 annual budget. The District has received this award for thirty consecutive years. We believe the fiscal year 2018 budget presentation continues to meet the GFOA's high standards and submitted it on July 25, 2017, for consideration.

Marion M. Gee

Marion M. Gee
Director of Finance

ORGANIZATION
(As of June 30, 2017)



Government Finance Officers Association

Certificate Of Achievement For Excellence In Financial Reporting

Presented to

Metropolitan St. Louis Sewer District
Missouri

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2016

Jeffrey R. Emer

Executive Directors/CEO

Financial Section

METROPOLITAN ST. LOUIS SEWER DISTRICT
SERVICE AREAS

INDEPENDENT AUDITORS' REPORT

Board of Trustees
The Metropolitan St. Louis Sewer District
St. Louis, Missouri

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activity of The Metropolitan St. Louis Sewer District, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the District's financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of The Metropolitan St. Louis Sewer District as of June 30, 2017, and the changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Board of Trustees
The Metropolitan St. Louis Sewer District

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability and Related Ratios for the Employees' Pension Plan, Employees' Pension Plan Schedule of Employer Contributions and Schedule of Funding Progress for the Other Post-Employment Benefit Plan, 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 Metropolitan St. Louis Sewer District's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. These 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.

The 2016 financial statements of The Metropolitan St. Louis Sewer District were audited by other auditors whose report dated October 17, 2016, expressed an unmodified opinion on those statements.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 17, 2017, on our consideration of The Metropolitan St. Louis Sewer 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 result of that testing, and not to provide an opinion on the effectiveness of Metropolitan St. Louis Sewer 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 Metropolitan St. Louis Sewer District's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

St Louis, Missouri
October 17, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS
For The Years Ended June 30, 2017 And 2016

The annual report of The Metropolitan St. Louis Sewer District ("MSD" or the "District") includes the independent auditors' report, management's discussion and analysis ("MD&A"), and the financial statements accompanied by notes essential to the user's understanding of the financial statements.

Management of the District has provided this MD&A to be used in combination with the District's financial statements. This narrative is intended to provide the reader with more insight into management's knowledge of the transactions, events, and conditions reflected in the accompanying financial statements and the fiscal policies that govern the District's operations.

2017 Financial Highlights

- The District increased capital assets by $200.2 million as a result of increases in construction in progress ($177.0 million), land ($1.0 million) and depreciable capital assets net of depreciation ($22.2 million).

- The District placed $105.3 million of capital assets into service during fiscal year 2017. The continued high level of capitalization reflects the District's work to meet long-term plans. Capitalized assets included:

Collection and pumping plant	$60.7 million
Treatment and disposal plant and equipment	$39.6 million
Land	$1.0 million
General plant and equipment	$4.0 million

In conjunction with the recording of additional depreciation relating to new assets, the net increase to accumulated depreciation was $75.4 million.

During the year, the District implemented Governmental Accounting Standards Board ("GASB") Statement No. 77, *Tax Abatement Disclosures*. This Statement requires disclosure of tax abatement information about (1) the District's own tax abatement agreements and (2) those that are entered into by other governments and that reduce the District's tax revenues. The requirements of this Statement improve financial reporting by giving users of financial statements essential information that has not been consistently or comprehensively reported to the public. In summary, the District has no direct tax abatement agreements but the effect of those entered into by the county and municipalities within the District's boundary decreases the District's tax revenues by $1,326,394.

2016 Financial Highlights

- The District increased capital assets by $160.5 million as a result of increases in construction in progress ($122.3 million), land ($13.2 million) and depreciable capital assets net of depreciation ($25.0 million).

- The District placed $123.6 million of capital assets into service during fiscal year 2016. The continued high level of capitalization reflects the District's work to meet long-term plans. Capitalized assets included:

Collection and pumping plant	$80.0 million
Treatment and disposal plant and equipment	$25.9 million
Land	$13.3 million
General plant and equipment	$4.4 million

In conjunction with the recording of additional depreciation relating to new assets, the net increase to accumulated depreciation was $79.3 million.

During the year, the District implemented Governmental Accounting Standards Board ("GASB") Statement No. 72, *Fair Value Measurement and Application*. The primary objective of this Statement is to improve financial reporting by state and local governments by clarifying the definition of fair value for financial reporting purposes, establishing general principles for measuring fair value, providing additional fair value application guidance, and enhancing disclosures about fair value measurements. The impact of adopting GASB Statement No. 72 is minimal as all material investments have been and are valued at fair value. No restatement is required as no changes were made to the prior year financial statements in order to comply with the new Statement.

Required Financial Statements

The financial statements presented by the management of the District include the Statements of Net Position; Statements of Revenues, Expenses, and Changes in Net Position; and Statements of Cash Flows. These statements are prepared using the accrual basis of accounting. This method of accounting recognizes revenue at the time it is earned and expenses when the related liability occurs. As a result of using this method of accounting, the District's performance over the time period being reported is more easily determinable.

The Statements of Net Position provide a report of the District's current, restricted, and other non-current assets such as cash, investments, receivables, and property. Also, the Statements of Net Position provide a summary of the District's current, restricted, and non-current liabilities, including contracts and accounts payable, deposits and accrued expenses, and bonds and notes payable. Deferred outflows and inflows, where applicable, are also included. The final section of the Statements of Net Position, the net position section, contains earnings retained for use by the District. Increases or decreases in the net position section may be indicative of an improving or declining financial position. This statement provides the basis for computing rate of return, evaluating the capital structure of the District, and assessing the liquidity and financial flexibility of the District.

The Statements of Revenues, Expenses, and Changes in Net Position summarize all of the year's revenue and expense. These statements indicate how successful the District was at maintaining expenses below the level of revenue earned.

The Statements of Cash Flows account for the net change in cash and cash equivalents by summarizing cash receipts and cash disbursements resulting from operating activities, non-capital financing activities, capital and related financing activities, and investing activities. These statements assist the user in determining the sources of cash coming into the District, the items for which cash was expended, and the beginning and ending cash balance.

Financial Analysis

The District's financial position improved in the current year, as evidenced by the increase in net position of $64.1 million. The improvement is due primarily to an increase in net investment in capital assets of $66.9 million. Net capital assets increased $200.2 million while debt related to the capital assets, net of the $27.7 million increase in unspent cash received upon the issuance of new senior debt ("Series 2016C"), only increased $132.8 million. The decrease in construction-related liabilities of $0.2 million increased net investment in capital assets while the increase in debt of $132.8 million and the amortization of the deferred losses recognized upon refundings of $0.7 million decreased net investment in capital assets. The net investment in capital asset increase was offset by a decrease in unrestricted and restricted funds of $1.5 million and $1.3 million, respectively.

Condensed Financial Statements and Analysis

Condensed Statements of Net Position
(000's)

	June 30, 2017	June 30, 2016	Increase (Decrease) 2017-2016	June 30, 2015	Increase (Decrease) 2016-2015
Assets:					
Current, restricted, and other assets	$ 743,572	$ 707,033	$ 36,539	$ 628,246	$ 78,787
Capital assets (net of accumulated depreciation)	3,252,238	3,052,043	200,195	2,891,569	160,474
Total Assets	3,995,810	3,759,076	236,734	3,519,815	239,261
Deferred Outflow of Resources:					
Bonds and Notes Payable-Deferred Loss	11,321	11,974	(653)	9,599	2,375
Pension-related Outflows	37,666	31,144	6,522	19,210	11,934
Total Deferred Outflow of Resources	48,987	43,118	5,869	28,809	14,309
Liabilities:					
Current liabilities	133,679	125,284	8,395	109,153	16,131
Non-current liabilities	1,515,345	1,344,141	171,204	1,158,445	185,696
Total Liabilities	1,649,024	1,469,425	179,599	1,267,598	201,827
Deferred Inflow of Resources:					
Pension-related Inflows	4,605	5,712	(1,107)	2,910	2,802
Total Deferred Inflow of Resources	4,605	5,712	(1,107)	2,910	2,802
Net Position:					
Net investment in capital assets	1,876,249	1,809,386	66,863	1,805,453	3,933
Restricted	135,259	136,547	(1,288)	142,445	(5,898)
Unrestricted	379,660	381,124	(1,464)	330,218	50,906
Total Net Position	$ 2,391,168	$ 2,327,057	$ 64,111	$ 2,278,116	$ 48,941

2017 Analysis

Current, restricted and other assets increased $36.5 million or 5.2% in the current year. The increase is predominately due to an increase in cash and investments due to higher sewer rates charged with increased collections and due to the unspent cash received on the senior debt issued in fiscal 2017.

Capital assets net of accumulated depreciation increased by $200.2 million or 6.6% in the current year as the result of continued high levels of construction and acquisition of assets by the District.

Current liabilities increased by $8.4 million or 6.7% due primarily to an increase in the current portion of bonds and notes payable and retainage held on capital projects which correlates with the increase in construction.

Non-current liabilities increased by $171.2 million or 12.7% primarily due to $203.8 million relating to the senior and subordinate debt issued in fiscal 2017 offset by $42.7 million for fiscal 2018 senior debt payments reclassified to current liabilities and $5.3 million for premium amortization and $14.4 million pertaining to the increase in the District's net pension liability.

Net deferred outflows and inflows increased $7.0 million or 18.6% due primarily to updates to various information provided by the District's actuary such as economic/demographic gains or losses, assumption changes or inputs, and investment gains or losses.

2016 Analysis

Current, restricted and other assets increased $78.8 million or 12.5% in the current year. The increase is predominately due to an increase in cash and investments due to higher sewer rates charged and collected and due to the unspent cash received on the senior debt issued in fiscal 2016. In addition, receivables recorded for insurance recoveries due to the December 2015 rain event increased current, restricted and other assets. The St. Louis area received a range of 6 to 12 inches of precipitation, with an average of 9 inches of rain falling over three days in December 2015. This rainfall impacted area rivers, causing flooding and damage at three MSD treatment plants.

Capital assets net of accumulated depreciation increased by $160.5 million or 5.5% as the result of continued high levels of construction and acquisition of assets by the District.

Current liabilities increased by $16.1 million or 14.8% due to an increase in the current portion of bonds and notes payable, contracts and accounts payable and retainage held on capital projects.

Non-current liabilities increased by $185.7 million or 16.0% due to the senior and subordinate debt issued in fiscal 2016, offset partially by the advance refunding of existing debt, and an increase in the District's net pension liability.

Net deferred outflows and inflows increased $11.5 million or 44.4% due primarily to updates to various information provided by the District's actuary such as economic/demographic gains or losses, assumption changes or inputs, and investment gains or losses related to the pension.

Statements of Revenues, Expenses, and Changes in Net Position
(000's)

	For the Fiscal Year Ended June 30, 2017	For the Fiscal Year Ended June 30, 2016	Increase (Decrease) 2017-2016	For the Fiscal Year Ended June 30, 2015	Increase (Decrease) 2016-2015
Operating Revenues:					
Sewer service charges	$ 330,873	$ 306,119	$ 24,754	$ 284,367	$ 21,752
Recovery (provision) for doubtful sewer service charge accounts	(2,513)	(4,107)	1,594	(2,096)	(2,011)
Licenses, permits, and other fees	4,036	3,620	416	6,657	(3,037)
Other	1,095	14,226	(13,131)	1,460	12,766
Total Operating Revenues	333,491	319,858	13,633	290,388	29,470
Non-operating Revenues:					
Property taxes levied by the district	32,458	25,671	6,787	24,764	907
Investment income	2,903	4,636	(1,733)	3,001	1,635
Rent and other income	106	103	3	37	66
Total Non-operating Revenues	35,467	30,410	5,057	27,802	2,608
Total Revenues	368,958	350,268	18,690	318,190	32,078
Operating Expenses:					
Pumping and treatment	60,203	59,100	1,103	60,766	(1,666)
Collection system maintenance	43,928	42,853	1,075	40,162	2,691
Engineering	11,290	10,998	292	10,954	44
General and administrative	58,535	55,315	3,220	48,551	6,764
Water backup claims	5,035	7,631	(2,596)	3,862	3,769
Depreciation	81,194	83,984	(2,790)	78,641	5,343
Asset management	14,893	13,215	1,678	13,586	(371)
Total Operating Expenses	275,078	273,096	1,982	256,522	16,574
Non-operating Expenses:					
Net loss on disposal and sale of capital assets	673	325	348	1,421	(1,096)
Non-recurring projects and studies	7,459	11,000	(3,541)	12,317	(1,317)
Interest expense	31,251	28,943	2,308	27,139	1,804
Total Non-operating Expenses	39,383	40,268	(885)	40,877	(609)
Total Expenses	314,461	313,364	1,097	297,399	15,965
Income Before Capital Grants And Contributions	54,497	36,904	17,593	20,791	16,113
Capital Grants And Contributions	9,614	12,037	(2,423)	12,997	(960)
Change in Net Position	64,111	48,941	15,170	33,788	15,153
Net Position - Beginning of Year	2,327,057	2,278,116	48,941	2,267,952	10,164
Effect of Adoption of GASB 68	—	—	—	(23,624)	23,624
Net Position - Beginning of Year, As Restated	2,327,057	2,278,116	48,941	2,244,328	33,788
Net Position - End of Year	$ 2,391,168	$ 2,327,057	$ 64,111	$ 2,278,116	$ 48,941

2017 Analysis

Net position increased $64.1 million or 2.8% over the prior year. Sewer service revenue increased as a result of rate increases. Non-operating property taxes levied by the District also increased due to the establishment of one new taxing district covering the District's entire service area which increased tax revenue.

Total revenue increased by $18.7 million or 5.3%. Sewer service charges increased $24.8 million or 8.1% with the provision for doubtful accounts decreasing by $1.6 million or 38.8% due to increased collections. Other operating revenue decreased $13.1 million or 92.3% due to insurance recoveries in fiscal 2016 related to the December 2015 rain event not repeated in fiscal 2017. Non-operating property taxes increased $6.8 million or 26.4% as a result of the new taxing district referenced above.

Total expenses increased slightly by $1.1 million or 0.4% with operating expenses increasing $2.0 million or 0.7% and non-operating expenses decreasing by $0.9 million or 2.2%. The largest operating expense increase was a $3.2 million or 5.8% increase in general and administrative costs primarily related to an increase in pension expense.

2016 Analysis

Net position increased $48.9 million or 2.1% over the prior year. Sewer service revenue increased as a result of rate increases. Other operating revenue increased due to the insurance recoveries recorded related to the December 2015 rain event. Operating expenses also increased primarily from various increases in operating costs, costs related to the December 2015 rain event, pension expense and depreciation.

Total revenue increased by $32.1 million or 10.1%. Sewer service charges increased $21.8 million or 7.6% with the provision for doubtful accounts increasing by $2.0 million or 95.9% due to increased receivables. Other operating revenue increased $12.8 million or 874.4% as explained above.

Total expenses increased by $16.0 million or 5.4%.

Operating expenses increased by $16.6 million or 6.5%. This increase was primarily the result of the following:

- $6.8 million or 13.9% increase in general and administrative costs primarily related to an increase in pension expense. In addition, costs incurred by the District related to the December 2015 rain event are recorded in the General Insurance Fund in the general and administrative operating expense line;
- $5.3 million or 6.8% increase in additional depreciation due to new asset capitalization;
- $3.8 million or 97.6% increase in water backup costs resulting from the historic flooding in December 2015.

Non-operating expenses decreased by $0.6 million or 1.5%.

Condensed Statements of Cash Flows
(000's)

	For the Fiscal Year Ended June 30, 2017	For the Fiscal Year Ended June 30, 2016	Increase (Decrease) 2017-2016	For the Fiscal Year Ended June 30, 2015	Increase (Decrease) 2016-2015
Cash flows from operating activities	$ 156,259	$ 127,665	$ 28,594	$ 116,430	$ 11,235
Cash flows from non-capital financing activities	32,013	25,583	6,430	25,824	(241)
Cash flows from capital and related financing activities	(154,634)	(91,512)	(63,122)	(225,778)	134,266
Cash flows from investing activities	(34,721)	(74,347)	39,626	86,331	(160,678)
Net increase (decrease) in cash and cash equivalents	(1,083)	(12,611)	11,528	2,807	(15,418)
Cash and cash equivalents at beginning of year	49,196	61,807	(12,611)	59,000	2,807
Cash And Cash Equivalents At End Of Year	$ 48,113	$ 49,196	$ (1,083)	$ 61,807	$ (12,611)

2017 Analysis

The District ended the year with $48.1 million in cash and cash equivalents or a decrease of $1.1 million or 2.2% from the prior year. Cash flows from operating activities increased by $28.6 million or 22.4% as a result of increased receipts from customers. Cash flows from non-capital financing activities increased by $6.4 million or 25.1% due to the new District-wide tax levy. Cash flow from capital and related financing activities decreased by $63.1 million or 69.0% due to increased spending for capital assets, decreased bond proceeds and premiums received in fiscal year 2017 compared to fiscal year 2016 and increased interest and fees paid on bonds. Cash flows from investing activities increased by $39.6 million. The increase primarily stems from a greater increase in proceeds from sale and maturity of investments than in purchase of investments from fiscal 2016 to fiscal 2017.

2016 Analysis

The District ended the year with $49.2 million in cash and cash equivalents or a decrease of $12.6 million from the prior year. Cash flows from operating activities increased by $11.2 million or 9.6% as a result of increased receipts from customers. Cash flows from non-capital financing activities decreased by $0.2 million or 0.9% due to less tax revenue collected. Cash flow from capital and related financing activities increased by $134.3 million or 59.5% as the result of increased bond proceeds and premiums received in fiscal year 2016 compared to fiscal year 2015. Cash flows from investing activities decreased by $160.7 million or 186.1%. The decrease primarily stems from a net outflow of cash related to purchases and proceeds in investments in fiscal year 2016, whereas fiscal year 2015 had a net inflow.

During fiscal year 2016, the District changed its reporting methodology so that investments with an original maturity of greater than 90 days remain as investments until they mature and the cash is received. As a result, cash and cash equivalents include only investments with original maturities less than 91 days. The retroactive change resulted in $90.1 million, $87.7 million and $120.0 million being reclassified from cash and cash equivalents to investments in fiscal year 2016, 2015, and 2014, respectively.

Capital Assets

**Condensed Statements of Capital Assets
Net of Depreciation
(000's)**

	June 30, 2017	June 30, 2016	Increase (Decrease) 2017-2016	June 30, 2015	Increase (Decrease) 2016-2015
Land	$ 70,695	$ 69,702	$ 993	$ 56,521	$ 13,181
Construction in progress	707,739	530,734	177,005	408,464	122,270
Treatment and disposal plant and equipment	736,367	729,884	6,483	739,563	(9,679)
Collection and pumping plant	1,716,004	1,697,795	18,209	1,659,321	38,474
General plant and equipment	21,433	23,928	(2,495)	27,700	(3,772)
Total	$ 3,252,238	$ 3,052,043	$ 200,195	$ 2,891,569	$ 160,474

2017 Analysis

Total capital assets, net of accumulated depreciation, increased by $200.2 million or 6.6% over the prior year. Construction in progress contained the majority of the increase with net additions of $177.0 million or 33.4% consisting of $269.3 million in additions offset by $92.3 million of assets placed into service. The net increase in collection and pumping plant assets was $18.2 million or 1.1%, primarily for capitalization of assets including new and improved sewers, dedicated assets and infrastructure repairs. Net treatment and disposal plant and equipment increased $6.5 million or 0.9%, including costs incurred to replace incinerator scrubbers to meet new regulatory emission standards and to capitalize assets destroyed in the December 2015 flood. Land increased $1.0 million or 1.4% due to the acquisition of easements and other land. General plant and equipment decreased $2.5 million or 10.4% primarily due to depreciation of existing assets. For more detailed information, see Note 4, Capital Assets, in the accompanying notes to the financial statements.

2016 Analysis

Total capital assets, net of accumulated depreciation, increased by $160.5 million or 5.5% over the prior year. Construction in progress contained the majority of the increase with net additions of $122.3 million or 29.9% consisting of $231.8 million in additions offset by $109.5 million of assets placed into service. Collection and pumping plant assets increased $38.5 million or 2.3% primarily due to the capitalization of assets including dedicated assets and infrastructure repairs. Land increased $13.2 million or 23.3% including a $12.4 million land reclassification from the Lower Meramec treatment plant asset in February 2016 and $0.8 million from the acquisition of easements and other land.

Treatment and disposal plant and equipment decreased a net $9.7 million or 1.3% with a net $25.5 million increase in additions offset by $35.2 million in additional depreciation. The $25.5 million net increase includes a $12.4 million decrease due to the land reclassification referenced above and the $3.2 million depreciation impact of the reclassification is included in the $35.2 million additional depreciation. General plant and equipment decreased $3.8 million or 13.6% primarily due to depreciation of existing assets. For more detailed information, see Note 4, Capital Assets, in the accompanying notes to the financial statements.

Long-Term Debt

Condensed Statements of Long-Term Debt
(000's)

	June 30, 2017	June 30, 2016	Increase (Decrease) 2017-2016	June 30, 2015	Increase (Decrease) 2016-2015
Senior Revenue Bonds:					
Series 2006C	$ —	$ —	$ —	$ 60,000	$ (60,000)
Series 2008A	—	—	—	30,000	(30,000)
Series 2010B	85,000	85,000	—	85,000	—
Series 2011B	43,410	45,325	(1,915)	47,170	(1,845)
Series 2012A	214,700	220,000	(5,300)	225,000	(5,000)
Series 2012B	134,710	137,280	(2,570)	139,605	(2,325)
Series 2013B	146,000	149,000	(3,000)	150,000	(1,000)
Series 2015B	221,355	223,855	(2,500)	—	223,855
Series 2016C	150,000	—	150,000	—	—
Subordinate Revenue Bonds:					
Series 2004B	81,545	89,650	(8,105)	97,520	(7,870)
Series 2005A	3,800	4,125	(325)	4,440	(315)
Series 2006A	25,600	27,950	(2,350)	29,915	(1,965)
Series 2006B	8,860	9,565	(705)	10,260	(695)
Series 2008AB	25,605	27,475	(1,870)	29,320	(1,845)
Missouri DNR:					
Series 2009A	16,441	17,514	(1,073)	18,564	(1,050)
Series 2010A	6,222	6,588	(366)	6,947	(359)
Series 2010C	28,361	30,024	(1,663)	31,644	(1,620)
Series 2011A	35,692	37,354	(1,662)	38,974	(1,620)
Series 2013A	47,786	49,920	(2,134)	52,000	(2,080)
Series 2015A	67,149	42,623	24,526	—	42,623
Series 2016A	147	—	147	—	—
Series 2016B	8,986	—	8,986	—	—
Energy Loan Program	68	118	(50)	151	(33)
Total	$ 1,351,437	$ 1,203,366	$ 148,071	$ 1,056,510	$ 146,856

2017 Analysis

The District ended fiscal year 2017 with $1.4 billion in long-term debt outstanding. The District had one senior revenue bond addition this year ("Series 2016C") for $150.0 million. In addition, the District added two new State Revolving Fund ("SRF") bonds ("Series 2016A" and "Series 2016B") totaling $9.1 million and withdrew $27.0 million in proceeds from the Series 2015A SRF bond. For more detailed information, see Note 6, Long-Term Liabilities, in the accompanying notes to the financial statements.

2016 Analysis

The District ended fiscal year 2016 with $1.2 billion in long-term debt outstanding. The District had one senior revenue bond addition this year ("Series 2015B") for a total of $223.9 million of which $73.9 million was used to partially advance refund the Series 2006C and the Series 2008A debt. Premium received on the new Series 2015B and excess funds in the bond reserve account were used to advance refund the remaining principal and interest on the Series 2006C and the Series 2008A debt. In addition, the District added a new State Revolving Fund ("SRF") bond ("Series 2015A") totaling $42.6 million. For more detailed information, see Note 6, Long-Term Liabilities, in the accompanying notes to the financial statements.

Decisions Impacting the Future

Integral to helping MSD's rate payers understand the Consent Decree ("CD") with the U.S. Environmental Protection Agency and the Missouri Coalition for the Environment, which settled a lawsuit for alleged violations of the Clean Water Act, was the initiation of Project Clear. See Note 12, Commitments And Contingencies, for additional information regarding this litigation. The goal of Project Clear is to help MSD's rate payers have a clear understanding of MSD's goals and objectives. Project Clear consists of three main components:

- Getting The Rain Out which is focused on reducing excess stormwater from entering the sewer system infrastructure to help reduce basement back-ups and overflows;
- Performing Repair and Maintenance to the existing infrastructure to ensure it operates as well as possible for as long as possible, and
- Building System Improvements where needed to increase the capacity of the system.

Project Clear will greatly affect the daily lives of many of our rate payers. Project Clear is needed to help the rate payer understand the individual and regional, as well as the immediate and long-term, benefits of the program.

Since February 2004, the voters of St. Louis have authorized the District to issue a total of $2.6 billion in wastewater revenue bonds. As of June 30, 2017, the District has issued $1.7 billion of the total authorization. The District's long-term wastewater capital improvement program will continue to be funded through a combination of additional bonds and wastewater rate increases.

Requests For Information

This financial report is designed to provide a general overview of the District's finances for all those with an interest in the District's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed or e-mailed to:

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THE METROPOLITAN ST. LOUIS SEWER DISTRICT

STATEMENTS OF NET POSITION

		June 30,	
Assets		**2017**	**2016**
Current Assets			
Unrestricted Current Assets			
Cash and cash equivalents	$	23,095,871	$ 26,934,021
Investments		280,288,468	166,147,564
Sewer service charges receivable, less allowance of $56,654,014 in 2017 and $55,728,507 in 2016		53,641,066	50,025,233
Unbilled sewer service charges receivable		26,513,717	24,728,826
Property taxes receivable, less allowance of $25,280 in 2017 and $39,127 in 2016		835,213	1,265,106
Accrued income on investments		1,016,453	805,879
Other receivables, less allowance of $119,264 in 2017 and $98,460 in 2016		4,707,358	10,184,895
Supplies inventory		7,671,206	7,088,804
Total Unrestricted Current Assets		397,769,352	287,180,328
Restricted Current Assets			
Cash and cash equivalents		2,171,935	2,065,003
Investments		29,674,144	13,393,010
Total Restricted Current Assets		31,846,079	15,458,013
Total Current Assets		429,615,431	302,638,341
Non-Current Assets			
Restricted Assets			
Cash and cash equivalents		22,845,206	20,197,452
Investments		157,273,177	134,209,021
Long-term investments		54,726,378	69,479,563
Property taxes receivable, less allowance of $32,041 in 2017 and $22,419 in 2016		1,139,195	724,886
Accrued income on investments		361,052	300,628
Other receivables		69,694	—
Total Restricted Non-Current Assets		236,414,702	224,911,550
Other Assets			
Notes receivable		12,425,336	12,999,370
Long-term investments		65,116,013	166,483,086
Total Other Assets		77,541,349	179,482,456
Capital Assets			
Depreciable:			
Treatment and disposal plant and equipment		1,279,143,367	1,239,993,981
Collection and pumping plant		2,475,709,689	2,419,647,020
General plant and equipment		94,793,873	92,393,025
		3,849,646,929	3,752,034,026
Less: Accumulated depreciation		1,375,842,413	1,300,427,525
Net depreciable assets		2,473,804,516	2,451,606,501
Non-depreciable:			
Land		70,695,016	69,702,470
Construction in progress		707,738,709	530,734,241
Net Capital Assets		3,252,238,241	3,052,043,212
Total Non-Current Assets		3,566,194,292	3,456,437,218
Total Assets		3,995,809,723	3,759,075,559
Deferred Outflows of Resources			
Bonds and notes payable-Deferred loss on refunding		11,320,670	11,973,700
Pension-related outflows		37,665,786	31,144,263
Total Deferred Outflows of Resources		48,986,456	43,117,963

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

STATEMENTS OF NET POSITION *(Continued)*

	June 30,	
Liabilities	**2017**	**2016**
Current Liabilities-Payable From Unrestricted Assets		
Contracts and accounts payable	$ 37,800,519	$ 37,420,758
Deposits and accrued expenses	39,646,015	38,958,762
Retainage payable	11,486,551	9,119,490
Current portion of bonds and notes payable	42,733,909	38,059,873
Total Current Liabilities-Payable From Unrestricted Assets	131,666,994	123,558,883
Current Liabilities-Payable From Restricted Assets		
Contracts and accounts payable	1,264,997	1,286,539
Retainage payable	746,642	438,547
Total Current Liabilities-Payable From Restricted Assets	2,011,639	1,725,086
Total Current Liabilities	133,678,633	125,283,969
Non-Current Liabilities		
Deposits and accrued expenses	15,137,690	14,198,048
Net pension liability	67,039,185	52,600,003
Bonds and notes payable	1,433,168,099	1,277,342,521
Total Non-Current Liabilities	1,515,344,974	1,344,140,572
Total Liabilities	1,649,023,607	1,469,424,541
Deferred Inflow of Resources		
Pension-related inflows	4,604,518	5,711,868
Total Deferred Inflow of Resources	4,604,518	5,711,868
Net Position		
Net investment in capital assets	1,876,248,859	1,809,386,175
Restricted for:		
Debt service	55,319,023	55,364,013
Subdistrict construction and improvement	79,940,036	81,182,753
Unrestricted	379,660,136	381,124,172
Total Net Position	$ 2,391,168,054	$ 2,327,057,113

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	For The Years Ended June 30, 2017	2016
Operating Revenues		
Sewer service charges	$ 330,873,269	$ 306,118,545
Provision for doubtful sewer service charge accounts	(2,513,743)	(4,106,652)
Licenses, permits and other fees	4,036,362	3,620,240
Other	1,095,101	14,225,598
Total Operating Revenues	333,490,989	319,857,731
Operating Expenses		
Pumping and treatment	60,203,037	59,099,820
Collection system maintenance	43,928,161	42,853,337
Engineering	11,289,906	10,997,619
General and administrative	58,534,411	55,315,372
Water backup claims	5,035,020	7,631,197
Depreciation	81,194,391	83,983,749
Asset management	14,892,749	13,214,611
Total Operating Expenses	275,077,675	273,095,705
Operating Income	58,413,314	46,762,026
Non-Operating Revenues		
Property taxes levied by the District	32,458,054	25,671,058
Investment income	2,902,624	4,635,866
Rent and other income	106,562	102,865
Total Non-Operating Revenues	35,467,240	30,409,789
Non-Operating Expenses		
Net loss on disposal and sale of capital assets	673,044	324,513
Non-recurring projects and studies	7,459,538	11,000,403
Interest expense	31,250,777	28,943,200
Total Non-Operating Expenses	39,383,359	40,268,116
Income Before Capital Grants And Contributions	54,497,195	36,903,699
Capital Grants And Contributions		
Utility plant contributed	6,807,147	11,271,085
Grant revenue	2,806,599	765,699
Total Capital Grants And Contributions	9,613,746	12,036,784
Change In Net Position	64,110,941	48,940,483
Net Position - Beginning Of Year	2,327,057,113	2,278,116,630
Net Position - End Of Year	$ 2,391,168,054	$ 2,327,057,113

STATEMENTS OF CASH FLOWS

	For The Years Ended June 30, 2017	2016
Cash Flows From Operating Activities		
Received from customers	$ 341,958,578	$ 307,087,452
Paid to employees for services	(94,528,620)	(94,386,428)
Paid to suppliers for goods and services	(91,171,051)	(85,035,869)
Net Cash Provided By Operating Activities	156,258,907	127,665,155
Cash Flows Provided By Non-Capital Financing Activities		
Taxes levied and collected	32,013,277	25,583,025
Cash Flows From Capital And Related Financing Activities		
Proceeds from capital grants	100,283	22,649
Proceeds from issuance of debt	185,520,681	192,622,808
Premium on sale of bonds	17,678,054	26,727,475
Interest received on bond proceeds to be used for capital improvements	—	—
Principal paid on debt	(38,076,770)	(38,565,916)
Interest and fees paid on debt	(54,306,129)	(47,582,180)
Payments for capital assets	(267,222,460)	(227,194,869)
Proceeds from sale of capital assets	48,920	834,701
Build America bond tax credit	1,622,822	1,623,694
Net Cash Provided By (Used In) Capital And Related Financing Activities	(154,634,599)	(91,511,638)
Cash Flows From Investing Activities		
Purchase of investments	(524,918,096)	(414,418,954)
Proceeds from sale and maturity of investments	483,199,458	333,435,010
Investment income	6,891,027	6,533,672
Proceeds from rents	106,562	102,865
Net Cash Provided By (Used In) Investing Activities	(34,721,049)	(74,347,407)
Net Decrease In Cash And Cash Equivalents	(1,083,464)	(12,610,865)
Cash And Cash Equivalents At Beginning Of Year	49,196,476	61,807,341
Cash And Cash Equivalents At End Of Year	$ 48,113,012	$ 49,196,476
Non-Cash Capital And Investing Activities		
Proceeds from debt issuance placed into escrow to refund bonds	$ —	73,855,000
Principal amount reduced and placed in escrow less reserve funds	—	(81,054,443)
Capital asset additions included in accounts payable	18,417,813	24,337,151
Utility plant contributed by other governments and developers	6,807,147	11,271,085
Fair value investment adjustment gain	1,847,824	1,763,059
Grant revenue	2,706,316	743,050

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STATEMENTS OF CASH FLOWS *(Continued)*

	For The Years Ended June 30, 2017	2016
Reconciliation Of Operating Income To Net Cash Flows Provided By Operating Activities		
Operating Income	$ 58,413,314	$ 46,762,026
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	81,194,391	83,983,749
Change in operating assets and liabilities:		
(Increase) in billed and unbilled sewer service charges receivable	(5,400,724)	(2,609,800)
(Increase) decrease in other receivables	8,636,127	(7,749,740)
(Increase) in supplies inventory	(582,402)	(728,265)
Increase in contracts and accounts payable	5,810,997	2,564,950
Increase in deposits and accrued expenses	1,376,895	1,870,437
Increase in net pension liability	14,439,182	12,704,012
(Decrease) increase in pension-related inflows	(1,107,350)	2,801,726
(Increase) in pension-related outflows	(6,521,523)	(11,933,940)
Net Cash Provided By Operating Activities	$ 156,258,907	$ 127,665,155

1. Organization And Summary Of Significant Accounting Policies

Organization

The Metropolitan St. Louis Sewer District ("District") was authorized by the voters, established and chartered under the provisions of the Constitution of Missouri as a municipal corporation and a political subdivision of the State of Missouri. Upon creation in 1954, the District assumed responsibilities to provide for the construction, operation, and maintenance of the sewer facilities within its defined boundaries. The District's service area now comprises all of the City of St. Louis and most of St. Louis County. Subdistricts within the District's total service area represent separate geographic areas within which specific taxes can be levied for the retirement of indebtedness issued to finance construction of sanitary or stormwater facilities within the area or to operate, maintain, or construct improvements within the subdistrict. The District also maintains all of the publicly owned stormwater sewers within its original boundaries and is continuing to accept maintenance of the stormwater sewers in the remainder of its service area.

Pursuant to provisions of its Charter and subject to limitations imposed by the Constitution of Missouri, all powers of the District are vested in a six-member Board of Trustees ("Board"), three of whom are appointed by the Mayor of the City of St. Louis and three of whom are appointed by the County Executive of St. Louis County.

Reporting Entity

The District defines its financial reporting entity to include all component units for which the District's governing body is financially accountable. To be considered financially accountable, the component unit must be fiscally dependent on the District and the District must either 1) be able to impose its will on the component unit or 2) the relationship must have the potential for creating a financial benefit or imposing a financial burden on the District.

Based on the foregoing, the District's financial statements include all funds that are established under the authority of the District's charter. There are no agencies, boards, commissions, or authorities that are controlled by or dependent on the District.

Measurement Focus, Basis Of Accounting And Financial Statement Presentation

Throughout the year, the District maintains its detailed accounting records on a modified accrual basis of accounting. In order to account for the transactions related to certain subdistricts and restricted resources, separate fund accounting records are maintained. For financial reporting purposes, the District reports its operations as a single enterprise fund. Accordingly, the accounting records are converted to the accrual basis of accounting and all interfund transactions are eliminated. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when the related liability is incurred. The District's measurement focus is on the flow of economic resources.

Revenues and expenses are divided into operating and non-operating items. Operating revenues generally result from providing services in connection with the District's principal ongoing operations. The principal operating revenues of the District are user fees, licenses, and permits for wastewater treatment services. Operating expenses include the costs associated with the conveyance and treatment of wastewater and stormwater, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

The District follows GASB Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*, which establishes accounting and financial reporting standards for nonexchange transactions involving financial or capital resources.

GASB Statement No. 33 groups nonexchange transactions into the following four classes, based upon their principal characteristics: derived tax revenues, imposed nonexchange revenues, government-mandated nonexchange transactions, and voluntary nonexchange transactions.

The District recognizes assets from imposed nonexchange revenue transactions in the period when an enforceable legal claim to the assets arises or when the resources are received, whichever occurs first. Revenues are recognized in the period when the resources are required to be used for the first period that use is permitted. The District recognizes revenues from property taxes, net of estimated refunds and estimated uncollectible amounts, in the period for which the taxes are levied. Imposed nonexchange revenues also include licenses, permits, and other fees.

Intergovernmental revenues, representing grants and assistance received from other governmental units, are generally recognized as revenues in the period when all eligibility requirements, as defined by GASB Statement No. 33, have been met. Any resources received where all requirements are met with the exception of the time requirement are recorded as deferred inflows. All other resources received before any other eligibility requirements are met are reported as unearned revenues.

When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, and then unrestricted resources as they are needed.

Cash And Cash Equivalents

The District considers highly liquid investments that have original maturity of less than 91 days to the District to be Cash Equivalents.

Investments

The District accounts for its investments at fair value. The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles pursuant to GASB Statement No. 72. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Changes in unrealized gain (loss) on the carrying value of investments are reported as a component of investment income in the Statements of Revenues, Expenses and Changes in Net Position.

Restricted Cash, Cash Equivalents And Investments

Cash, cash equivalents and investments that are externally restricted are classified as restricted assets. These assets are used to make debt service payments, maintain sinking or reserve funds, purchase or construct capital or other non-current assets or for other restricted purposes.

Accounts Receivable

Accounts receivable is composed primarily of charges to customers for wastewater and stormwater services. In fiscal year 2016 the stormwater sewer service charge was $.24 per month for a single residential unit and $.18 per month per unit for multi-residential units. Beginning in fiscal year 2017, with the voter approval of one taxing district covering the entire MSD service area, these stormwater sewer service charges were eliminated. Receivables are reported at their gross values net of an allowance for uncollectible amounts. Unbilled sewer service charge revenues are accrued by the District based on estimated billings for services provided through the end of the current fiscal year.

Capital Assets

In order to measure long-term assets such as capital assets, including infrastructure, a study was performed in 1981 to value existing assets at historical cost or estimated historical cost. Capital assets acquired since that historical study are recorded at historical cost on the acquisition date. In accordance with GASB Statement No. 72, donated capital assets are recorded at acquisition value at the time the asset is considered operational. Interest cost is capitalized as part of the historical cost of acquiring certain assets when the effect of such capitalization is material to the financial statements. Interest is not capitalized on assets constructed with contributions from other governmental sources. Depreciation is calculated on a straight-line basis over the following estimated useful lives:

Treatment and disposal plant and equipment	3 to 100 years
Collection and pumping plant	7 to 100 years
General plant and equipment	3 to 12 years

When developing user charge rates, the District includes funding for replacement cost of assets, which may differ from depreciation expense recorded for financial reporting purposes.

Normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized. Betterments are capitalized and depreciated over the remaining useful lives of the related assets, as applicable. The District defines capital assets as assets with an initial, individual cost of more than $5,000 and an estimated useful life in excess of three years.

Capitalization Of Interest

Interest costs are capitalized as part of the costs of capital assets during the period of construction based on the related weighted average net borrowing costs incurred. Interest earned on temporary investments acquired with the proceeds of such borrowed funds from the date of the borrowing until the assets are ready for their intended use is used to reduce the interest costs capitalized on the constructed assets. Interest is not capitalized for outlays financed by capital grants (or other outside parties) externally restricted for the acquisition of specified assets. In 2017 and 2016, the District's total net interest cost incurred on tax-exempt borrowings during the fiscal year was $44,057,337 and $37,475,123, respectively. Of this net interest cost, $18,040,989 and $14,733,405 was capitalized and $26,016,348 and $22,741,718 was expensed in 2017 and 2016, respectively.

Supplies Inventory

Supplies inventory consists of parts and supplies to be used to operate and maintain treatment facilities and various treatment-related equipment at the District. This inventory figure is netted against those materials and supplies deemed to be obsolete. All inventory is stated at weighted average cost and expenses are recognized when the inventory is consumed.

Net Position

One component of the District's net position is the net investment in capital assets which consists of capital assets, including restricted capital assets, net of accumulated depreciation, reduced by the net outstanding debt and construction-related liabilities, including premiums and discounts on such debt, which is attributable to the acquisition, construction, or improvement of those assets. The outstanding debt is net of the cash and investments from the debt that has not yet been expended. Deferred losses on refundings are also included in the net investment in capital assets net position.

The restricted component of net position consists of assets and liabilities regulated by external constraints imposed by creditors, grantors, contributors, laws, or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation. Property taxes levied by the various subdistricts and other revenues received for construction in those subdistricts have also been restricted for that use. Sewer extension and connection fees, grants, and other revenues received for construction within certain subdistricts have been restricted for that use. In addition, a portion of sanitary sewer charges have been restricted for the payment of principal and interest, including accrued interest, on certain debt of the District.

The unrestricted net position component of net position consists of net position that does not meet the definition of restricted or net investment in capital assets. The District first applies restricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available.

The net position components in the 2016 financial statements have been reclassified to conform to the 2017 presentation. These reclassifications do not affect total net position as previously reported.

Deferred Outflow Of Resources And Deferred Inflow Of Resources

In addition to assets, financial statements may report a separate section for deferred outflows of resources. Deferred outflows of resources consists of the consumption of net position that is applicable to a future reporting period and so will not be recognized as an outflow of resources until then. Deferred outflows of resources related to refunding long-term debt is reported in the Statement of Net Position. A deferred bond refunding amount results from the difference in the carrying value of refunded debt and its reacquisition price, and is amortized over the shorter of the life of the refunded or refunding debt. The pension related deferred outflows of resources represent contributions made to the plan between the measurement date of the pension obligations and the end of the fiscal year as well as certain actuarial differences and changes that are amortized over future periods.

In addition to liabilities, financial statements may report a separate section for deferred inflows of resources. Deferred inflows of resources consists of the acquisition of net position that is applicable to a future reporting period and so will not be recognized as an inflow of resources until then. The District's deferred inflows of resources relate to certain changes in pension obligations that are amortized over future periods.

Capital Contributions

Capital contributions to the District represent government grants and other aid used to fund capital projects. In accordance with GASB Statement No. 33, capital contributions are recognized as revenue when the expenditure is made and the amount becomes subject to claim for reimbursement.

Bond Premiums, Discounts And Issuance Costs

In the District's financial statements, bond premiums and discounts are amortized over the life of the bonds using the effective interest method. Bond issuance costs are expensed when incurred. Bonds and notes payable are reported net of the applicable bond premium or discount.

Compensated Absences

Vacation

Under the terms of the District's personnel policies, employees are allowed to carry a maximum of 30 to 45 days of vacation (depending on length of service) from one calendar year to the next. Since vacation accrued at year-end is expected to be used by the employee during the following fiscal year, the accrual is reported as a component of current deposits and accrued expenses payable.

Sick Leave

Employees earn sick pay benefits at accrual rates ranging from 10 days per year to 12 days per year (depending on length of service). Unused sick leave can be carried over at year-end without limitation. An employee retiring from the District with five or more years of service will be compensated for any unused accrued sick leave at the rate of 1.25% for each year of District service multiplied by the unused accrued sick leave remaining at the employee's current rate of pay up to a maximum of $50,000. The District has recorded a liability which has been actuarially determined to be equal to the accumulated expense charge that will amortize the employees' benefits over their period of District service. The liability, included in current deposits and accrued expenses payable, includes vested accumulated rights to receive sick leave benefits estimated to be paid within one year. The portion of sick leave expected to be paid after one year is recorded as a component of non-current deposits and accrued expenses payable.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, the fiduciary net position of The Metropolitan St. Louis Sewer District Employees' Pension Plan ("Plan") and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan, which has a December 31 reporting period. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Use Of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts in the financial statements. Actual results could differ from those estimates.

Adoption Of New Accounting Standards

During fiscal year 2017, the District implemented GASB Statement No. 77, *Tax Abatement Disclosures*. This Statement requires disclosure of tax abatement information about (1) the District's own tax abatement agreements and (2) those that are entered into by other governments and that reduce the District's tax revenues. The requirements of this Statement improve financial reporting by giving users of financial statements essential information that has not been consistently or comprehensively reported to the public. Disclosure of information about the nature and magnitude of tax abatements will make these transactions more transparent to financial statement users and as a result, users will be better equipped to understand (1) how tax abatements affect the District's ability to raise resources and meet its financial obligations and (2) the impact those abatements have on the District's financial position and economic condition. The disclosures required by this Statement are presented in Footnote 15, Tax Abatements.

During fiscal year 2016, the District implemented GASB Statement No. 72, *Fair Value Measurement and Application*. This Statement superseded selected paragraphs and footnotes and amended selected paragraphs in various Statements of the Governmental Accounting Standards Board. The primary objective of this Statement is to improve financial reporting by state and local governments by clarifying the definition of fair value for financial reporting purposes, establishing general principles for measuring fair value, providing additional fair value application guidance, and enhancing disclosures about fair value measurements. The District accounts for investments at fair value by using quoted market prices which materially matches GASB Statement No. 72. The disclosures required by this Statement are presented in Footnote 2, Deposits and Investments.

2. Deposits and Investments

Deposits

At June 30, 2017 the reported amount of the District's deposits was $31,610,342 and the bank balance was $34,222,886. Of the bank balance, $1,003,427 was covered by federal depository insurance; $33,179,256 was collateralized with securities held by a third party financial institution in the District's name. In addition, the District has money market mutual funds of $16,502,670 held in a trusted escrow account for the State that will be used to make future bond payments.

At June 30, 2016 the reported amount of the District's deposits was $33,734,360 and the bank balance was $37,603,299. Of the bank balance, $865,854 was covered by federal depository insurance; $36,653,652 was collateralized with securities held by a third party financial institution in the District's name. In addition, the District has money market mutual funds of $15,462,116 held in a trusted escrow account for the State that will be used to make future bond payments.

Custodial credit risk for deposits is the risk that, in the event of bank failure, the District's deposits may not be returned to the District. The District's investment policy complies with the provisions of state laws and requires collateralization on repurchase agreements, time certificates of deposit and deposits with banking institutions with a fair value of 103%.

Deposits in each bank are insured by the Federal Deposit Insurance Corporation ("FDIC") in the amount of $250,000 for interest bearing accounts and noninterest bearing accounts.

Investments

With the approval of the District's Board of Trustees, the Secretary-Treasurer is authorized to invest excess cash in any investment authorized by the District's Charter. The District's investment policy conforms to the investment policy guidelines for the State of Missouri. The District's investment policy authorizes the District to invest in the following instruments: U.S. Treasury obligations, certificates of deposit, obligations of any agency or instrumentality of the U.S., repurchase agreements, bankers' acceptances, and commercial paper, all according to terms specified in the policy. The District also has investments in money market mutual funds that hold securities approved by the District's investment policy. At June 30, 2017 and 2016, all of the District's investments were in compliance with the District's investment policy and charter.

A summary of deposits and investments as of June 30, 2017 and 2016 is as follows:

Investment Type	2017 Cost	2017 Fair Value	2016 Cost	2016 Fair Value
Deposits	$ 31,610,342	$ 31,610,342	$ 33,734,360	$ 33,734,360
Money Market Mutual Funds	16,502,670	16,502,670	15,462,116	15,462,116
Certificates of Deposit	—	—	100,000	100,000
U.S. Treasury and Agency Obligations	488,079,396	486,365,173	495,637,069	496,034,377
Commercial Paper	100,349,746	100,713,007	53,478,311	53,577,867
Total	$ 636,542,154	$ 635,191,192	$ 598,411,856	$ 598,908,720

Reconciliation to the financial statements:

	2017	2016
Cash and Cash Equivalents		
Unrestricted Current	$ 23,095,871	$ 26,934,021
Restricted Current	2,171,935	2,065,003
Restricted Non-Current	22,845,206	20,197,452
Investments		
Unrestricted Current	280,288,468	166,147,564
Restricted Current	29,674,144	13,393,010
Restricted Non-Current	157,273,177	134,209,021
Long-Term Investments		
Restricted Non-Current	54,726,378	69,479,563
Other	65,116,013	166,483,086
	$ 635,191,192	$ 598,908,720

Interest Rate Risk

As of June 30, 2017 and 2016, the District had the following investments and maturities:

	2017		2016	
Investment Type	Fair Value	Weighted Average Maturity (Years)	Fair Value	Weighted Average Maturity (Years)
Certificates of Deposit	$ —	—	$ 100,000	0.72
U.S. Treasury Obligations	189,636,435	0.19	252,489,204	0.39
U.S. Agency Obligations	296,728,738	0.67	243,545,173	0.73
Commercial Paper	100,713,007	0.19	53,577,867	0.24
Total	$ 587,078,180	0.43	$ 549,712,244	0.53

In accordance with the District's investment policy, the District will minimize the risk that the fair value of debt securities in the portfolio will fall due to increases in general interest rates by:

1. Structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity.
2. Investing operating funds primarily in short-term securities.
3. State law limits the maximum stated maturities to five years on any investment from the date of purchase.

Long-Term Investments

While the majority of the District's portfolio is made up of short-term investments, the District also categorizes a sizeable amount as long-term under the categories discussed in Note 1, Organization and Summary of Significant Accounting Policies. The District is allowed to purchase long-term callable securities. These callable securities give the issuer the right to redeem at predetermined prices at a specific time prior to maturity. When a security is called, the District reflects an immediate reclassification from long-term investment to cash.

Custodial/Credit Risk

The District will minimize credit risk for investments, the risk of loss due to failure of the security issuer or backer, by:

1. Prequalifying the financial institutions, broker/dealers, intermediaries, and advisors with which the District will do business.
2. Diversifying the portfolio so that potential losses on individual securities will be minimized.

In accordance with its investment policy, the District limits its investments in these investment types to the top rating issued by Nationally Recognized Statistical Rating Organizations. As of June 30, 2017 and 2016, the District's investments in commercial paper were rated A-1 by Standard & Poor's ("S&P") and P-1 by Moody's Investors Service ("Moody's"). The District's investments in U.S. agency obligations that do not carry the explicit guarantee of the U.S. Government all carry a rating assigned by S&P of AA+ or higher. Money market investments are rated as AAAm and Aaa-mf by S&P and Moody's, respectively.

Concentration of Credit Risk

The District's investment policy places no limit on the amount the District may invest in any one issuer with respect to U.S. Treasury obligations and collateralized time and demand deposits. U.S. agency obligations and government-sponsored enterprises are limited to 60% of the portfolio, with no more than 30% of the total portfolio invested in securities of any one agency; and collateralized repurchase agreements are limited to 50% of the portfolio. U.S. agency callable securities are limited to 30% of the portfolio, and commercial paper and bankers' acceptances are limited to 25% each, with no more than 5% of the total portfolio invested in any one issuer at the time of purchase. The following table lists investments in issuers that represent 5% or more of total investments at June 30, 2017 and 2016:

	Percent Of Total Investments	
Issuer	**2017**	**2016**
Treasury Notes	32.3	45.9
Federal Home Loan Bank	19.0	20.5
Federal National Mortgage Association	12.2	10.4
Federal Home Loan Mortgage Corporation	11.7	11.3
Bank of Tokyo - Mitsubishi UFJ	5.5	2.7

Fair Value Measurement and Application

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles pursuant to GASB Statement No. 72. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The District has the following recurring fair value measurements as of June 30, 2017:

- Money Market Mutual Funds of $16.5 million are valued using a market approach to measuring fair value prices that considers relevant information generated by market transactions involving identical or similar assets or groups of assets. (Level 2 inputs)
- U.S. Treasury and Agency Obligations of $486.4 million are valued using a market approach to measuring fair value prices that considers relevant information generated by market transactions involving identical or similar assets or groups of assets. (Level 2 inputs)
- Commercial Paper of $100.7 million is valued using a market approach to measuring fair value prices that considers relevant information generated by market transactions involving identical or similar assets or group of assets. (Level 2 inputs)

3. Notes Receivable

The District has a note receivable with Missouri American Water Company ("MOAM") for its portion of the capital costs related to the Lower Meramec Wastewater Treatment Plant. The original loan bears interest at 4.35%, while the two loans added during fiscal year 2013 bear interest at 4.50% and 3.52%. The current portion of this note is contained in the Unrestricted Other Receivables line on the Statements of Net Position. The note receivable will mature in fiscal year 2033.

At June 30, 2017, future payments are as follows:

2018	$	1,154,696
2019		1,154,696
2020		1,154,696
2021		1,154,696
2022		1,154,696
2023-2027		5,773,479
2028-2032		5,773,479
2033		563,798
		17,884,236
Less: Amount representing interest		4,898,251
	$	12,985,985
Classification in Statement of Net Position:		
Current	$	602,919
Non-current		12,383,066
Total	$	12,985,985

The District also has a note receivable due to its participation in the Contractor Loan Fund, a consortium of local organizations desiring to pool bank loans, private investment, and new market tax credits to provide access to capital for Minority and Women-owned Business Enterprise companies that are certified through a City of St. Louis agency. At June 30, 2017, MSD's note receivable related to the Contractor Loan Fund is $42,270.

4. Capital Assets

The following is a summary of capital assets changes for the fiscal years ended June 30, 2017 and 2016:

	Balance June 30, 2016	Additions	Deletions	Balance June 30, 2017
Capital assets not being depreciated:				
Land	$ 69,702,470	$ 1,022,893	$ 30,347	$ 70,695,016
Construction in progress	530,734,241	269,349,532	92,345,064	707,738,709
Total capital assets not being depreciated	600,436,711	270,372,425	92,375,411	778,433,725
Capital assets being depreciated:				
Treatment and disposal plant and equipment	1,239,993,981	39,643,299	493,913	1,279,143,367
Collection and pumping plant	2,419,647,020	60,677,011	4,614,342	2,475,709,689
General plant and equipment	92,393,025	4,016,633	1,615,785	94,793,873
Total capital assets being depreciated	3,752,034,026	104,336,943	6,724,040	3,849,646,929
Less: Accumulated depreciation:				
Treatment and disposal plant and equipment	(510,110,382)	(32,926,833)	(261,039)	(542,776,176)
Collection and pumping plant	(721,852,339)	(41,808,127)	(3,954,691)	(759,705,775)
General plant and equipment	(68,464,804)	(6,459,431)	(1,563,773)	(73,360,462)
Total accumulated depreciation	(1,300,427,525)	(81,194,391)	(5,779,503)	(1,375,842,413)
Total capital assets being depreciated, net	2,451,606,501	23,142,552	944,537	2,473,804,516
Total Capital Assets	$ 3,052,043,212	$ 293,514,977	$ 93,319,948	$ 3,252,238,241

	Balance June 30, 2015	Additions	Deletions	Balance June 30, 2016
Capital assets not being depreciated:				
Land	$ 56,520,708	$ 13,261,762	$ 80,000	$ 69,702,470
Construction in progress	408,463,554	231,846,711	109,576,024	530,734,241
Total capital assets not being depreciated	464,984,262	245,108,473	109,656,024	600,436,711
Capital assets being depreciated:				
Treatment and disposal plant and equipment	1,214,483,762	25,920,470	410,251	1,239,993,981
Collection and pumping plant	2,341,025,509	80,022,507	1,400,996	2,419,647,020
General plant and equipment	92,198,891	4,374,910	4,180,776	92,393,025
Total capital assets being depreciated	3,647,708,162	110,317,887	5,992,023	3,752,034,026
Less: Accumulated depreciation:				
Treatment and disposal plant and equipment	(474,920,704)	(35,577,561)	(387,883)	(510,110,382)
Collection and pumping plant	(681,703,916)	(40,728,438)	(580,015)	(721,852,339)
General plant and equipment	(64,498,493)	(7,677,750)	(3,711,439)	(68,464,804)
Total accumulated depreciation	(1,221,123,113)	(83,983,749)	(4,679,337)	(1,300,427,525)
Total capital assets being depreciated, net	2,426,585,049	26,334,138	1,312,686	2,451,606,501
Total Capital Assets	$ 2,891,569,311	$ 271,442,611	$ 110,968,710	$ 3,052,043,212

5. Property Tax

On or before October 1 of each year, the District levies ad valorem taxes on all taxable tangible property, real and personal, within its boundaries based on assessed valuations established by the City of St. Louis and St. Louis County Assessors. Taxes levied are used for operations and stormwater maintenance, debt service, and construction. Taxes are recorded as non-operating revenues. Property tax bills are typically mailed in October. They become delinquent and represent a lien on the related property if not paid by December 31. All property taxes are billed and collected by the City of St. Louis and St. Louis County Collectors' of Revenue and are remitted to the District monthly.

On April 5, 2016, MSD customers voted to approve a stormwater service proposition whereby effective July 1, 2016, MSD roll backed and eliminated several existing taxes, eliminated the stormwater fee and, in lieu of these funding mechanisms, instituted or left in place two taxing districts that covered MSD's entire service area. The overriding benefit of the stormwater proposition is that customers will be treated equally under the new system, meaning that all customers are subject to the same tax rates and all customers receive the same level of stormwater services.

In fiscal years 2017 and 2016, the District recorded revenue from property taxes in the amount of $32,458,054 and $25,671,058, respectively.

6. Long-Term Liabilities

The following is a summary of changes in the District's long-term liabilities for the year ended June 30, 2017:

	Original Issuance Amounts	Balance June 30, 2016	Additions	Retirements	Balance June 30, 2017	Current Portion
Bonds and Notes Payable:						
Wastewater System Senior Revenue Bonds:						
Series 2010B	$ 85,000,000	$ 85,000,000	$ —	$ —	$ 85,000,000	$ —
Series 2011B	52,250,000	45,325,000	—	1,915,000	43,410,000	2,010,000
Series 2012A	225,000,000	220,000,000	—	5,300,000	214,700,000	5,300,000
Series 2012B	141,730,000	137,280,000	—	2,570,000	134,710,000	2,775,000
Series 2013B	150,000,000	149,000,000	—	3,000,000	146,000,000	3,000,000
Series 2015B	223,855,000	223,855,000	—	2,500,000	221,355,000	2,575,000
Series 2016C	150,000,000	—	150,000,000	—	150,000,000	2,705,000
Water Pollution Control and Drinking Water Subordinate Revenue Bonds (State Revolving Funds Program):						
Series 2004B	161,280,000	89,650,000	—	8,105,000	81,545,000	8,355,000
Series 2005A	6,800,000	4,125,000	—	325,000	3,800,000	335,000
Series 2006A	42,715,000	27,950,000	—	2,350,000	25,600,000	2,285,000
Series 2006B	14,205,000	9,565,000	—	705,000	8,860,000	720,000
Series 2008A/B	40,000,000	27,475,000	—	1,870,000	25,605,000	1,905,000
Missouri Department of Natural Resources:						
Energy Loan Program	223,793	118,206	—	50,071	68,135	17,109
Series 2009A	23,000,000	17,514,200	—	1,073,700	16,440,500	1,098,500
Series 2010A	7,980,700	6,588,400	—	366,000	6,222,400	373,300
Series 2010C	37,000,000	30,024,000	—	1,663,000	28,361,000	1,705,000
Series 2011A	39,769,300	37,354,300	—	1,662,000	35,692,300	1,704,000
Series 2013A	52,000,000	49,920,000	—	2,134,000	47,786,000	2,190,000
Series 2015A	75,000,000	42,622,810	27,013,924	2,488,000	67,148,734	3,266,000
Series 2016A	20,000,000	—	146,500	—	146,500	415,000
Series 2016B	75,500,000	—	8,986,258	—	8,986,258	—
	$ 1,623,308,793	$ 1,203,366,916	$ 186,146,682	$ 38,076,771	1,351,436,827	$ 42,733,909
Add:						
Unamortized premium, net of discount					124,465,181	
Total Bonds and Notes Payable					$ 1,475,902,008	
Current Portion of Bonds and Notes Payable					$ 42,733,909	
Non-Current Bonds and Notes Payable					1,433,168,099	
Total Bonds and Notes Payable					$ 1,475,902,008	
Net Pension Liability		$ 52,600,003	$ 14,439,182	$ —	$ 67,039,185	$ —
Deposits and Accrued Expenses						
Landfill closure and postclosure costs		$ 821,732	$ (313,310)	$ —	$ 508,422	$ —
Compensated absences		8,497,114	812,994	555,192	8,754,916	2,188,729
Net OPEB obligation		7,003,477	2,576,404	1,516,800	8,063,081	—
Total Deposits and Accrued Expenses		$ 16,322,323	$ 3,076,088	$ 2,071,992	$ 17,326,419	$ 2,188,729
Current Portion (Compensated absences) in Current Deposits and Accrued Expenses					$ 2,188,729	
Non-Current Deposits and Accrued Expenses					15,137,690	
Total Deposits and Accrued Expenses					$ 17,326,419	

The following is a summary of changes in the District's long-term liabilities for the year ended June 30, 2016:

	Original Issuance Amounts	Balance June 30, 2015	Additions	Retirements	Balance June 30, 2016	Current Portion
Bonds and Notes Payable:						
Wastewater System Senior Revenue Bonds:						
Series 2006C	$ 60,000,000	$ 60,000,000	$ —	$ 60,000,000	$ —	$ —
Series 2008A	30,000,000	30,000,000	—	30,000,000	—	—
Series 2010B	85,000,000	85,000,000	—	—	85,000,000	—
Series 2011B	52,250,000	47,170,000	—	1,845,000	45,325,000	1,915,000
Series 2012A	225,000,000	225,000,000	—	5,000,000	220,000,000	5,300,000
Series 2012B	141,730,000	139,605,000	—	2,325,000	137,280,000	2,570,000
Series 2013B	150,000,000	150,000,000	—	1,000,000	149,000,000	3,000,000
Series 2015B	223,855,000	—	223,855,000	—	223,855,000	2,500,000
Water Pollution Control and Drinking Water Subordinate Revenue Bonds (State Revolving Funds Program):						
Series 2004B	161,280,000	97,520,000	—	7,870,000	89,650,000	8,105,000
Series 2005A	6,800,000	4,440,000	—	315,000	4,125,000	325,000
Series 2006A	42,715,000	29,915,000	—	1,965,000	27,950,000	2,350,000
Series 2006B	14,205,000	10,260,000	—	695,000	9,565,000	705,000
Series 2008A/B	40,000,000	29,320,000	—	1,845,000	27,475,000	1,870,000
Missouri Department of Natural Resources:						
Energy Loan Program	223,793	150,565	—	32,359	118,206	33,173
Series 2009A	23,000,000	18,563,600	—	1,049,400	17,514,200	1,073,700
Series 2010A	7,980,700	6,947,000	—	358,600	6,588,400	366,000
Series 2010C	37,000,000	31,644,000	—	1,620,000	30,024,000	1,663,000
Series 2011A	39,769,300	38,974,300	—	1,620,000	37,354,300	1,662,000
Series 2013A	52,000,000	52,000,000	—	2,080,000	49,920,000	2,134,000
Series 2015A	75,000,000	—	42,622,810	—	42,622,810	2,488,000
	$ 1,467,808,793	$ 1,056,509,465	$ 266,477,810	$ 119,620,359	1,203,366,916	$ 38,059,873
Add:						
Unamortized premium, net of discount					112,035,478	
Total Bonds and Notes Payable					$ 1,315,402,394	
Current Portion of Bonds and Notes Payable					$ 38,059,873	
Non-Current Bonds and Notes Payable					1,277,342,521	
Total Bonds and Notes Payable					$ 1,315,402,394	
Net Pension Liability		$ 39,895,991	$ 12,704,012	$ —	$ 52,600,003	$ —
Deposits and Accrued Expenses						
Landfill closure and post-closure costs		$ 783,473	$ 38,259	$ —	$ 821,732	$ —
Compensated absences		8,421,028	825,228	749,142	8,497,114	2,124,275
Net OPEB obligation		5,968,543	2,554,734	1,519,800	7,003,477	—
Total Deposits and Accrued Expenses		$ 15,173,044	$ 3,418,221	$ 2,268,942	$ 16,322,323	$ 2,124,275
Current Portion (Compensated absences) in Current Deposits and Accrued Expenses					$ 2,124,275	
Non-Current Deposits and Accrued Expenses					14,198,048	
Total Deposits and Accrued Expenses					$ 16,322,323	

Wastewater System Revenue Bonds Payable

In February 2004, the District received voter authorization for $500,000,000 of revenue bonds. In August 2008, the District received voter authorization for an additional $275,000,000 of revenue bonds. In June 2012, the District received voter authorization for another $945,000,000 of revenue bonds. In April 2016, the District received voter authorization for another $900,000,000 of revenue bonds. From the total voter authorization of $2,620,000,000, $947,500,000 has not been issued as of June 30, 2017. These funds were sought to enable the District to comply with federal and state clean water requirements.

In December 2016, the District issued $150,000,000 of Wastewater System Revenue Bonds Series 2016C ("Series 2016C"). These bonds were issued pursuant to the June 2012 authorization; in this case for the purpose of construction, repairing, replacing, and equipping new and existing District wastewater facilities and as of June 30, 2017 $46,235,069 has been expended. A premium of $17,678,054 was received on the issuance of Series 2016C. These 2016C senior bonds have interest rates ranging from 2.0% to 5.0% and are payable in semiannual installments at varying amounts through May 1, 2046.

In December 2015, the District issued $223,855,000 of Wastewater System Revenue Bonds Series 2015B ("Series 2015B"). These bonds were issued for two purposes: $73,855,000 was issued to advance refund the Series 2006C and Series 2008A bonds and $150,000,000 was issued pursuant to the June 2012 authorization; in this case for the purpose of constructing, repairing, replacing, and equipping new and existing District wastewater facilities and as of June 30, 2017, the $150,000,000 has been expended. A premium of $26,727,475 was received on the $150,000,000 portion of Series 2015B. These 2015B senior bonds have interest rates ranging from 3.0% to 5.0% and are payable in semiannual installments at varying amounts through May 1, 2045.

The Series 2015B refunding net proceeds of $86,848,034 (including a premium of $13,623,487 and after payments of $337,848 in underwriting fees and $292,605 in issuance costs) and the $8,945,557 in excess debt reserves the District contributed were used to purchase U.S. government securities. These securities were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the Series 2006C and Series 2008A bonds. The sum of the $95,793,591 deposited into escrow and the earnings on the U.S. government securities funded the $90 million in principal payments and $4,534,435 in interest paid in fiscal 2017 relating to the Series 2006C and Series 2008A bonds. As a result of placing the cash with an escrow agent in a trust, Series 2006C and Series 2008A bonds were defeased and the liability for those bonds were removed from the financial statements. This refunding decreased total debt service payments over the next 22 years by $33,032,176, resulting in an economic gain (difference between the present values of the debt service requirements on the old and new debt adjusted for additional cash paid) of $14,544,866.

In December 2013, the District issued $150,000,000 of Wastewater System Revenue Bonds Series 2013B (“Series 2013B”). These bonds were issued pursuant to the June 2012 authorization; in this case for the purpose of constructing, repairing, replacing, and equipping new and existing District wastewater facilities. All funds from this issuance have been expended. These senior bonds have interest rates ranging from 2.0% to 5.0% and are payable in semiannual installments at varying amounts through May 1, 2043.

In November 2012, the District issued $141,730,000 of Wastewater System Refunding Bonds Series 2012B (“Series 2012B”). These bonds were issued to advance refund the Series 2004A bonds maturing in fiscal years 2015 and thereafter. These 2012B senior bonds have interest rates ranging from 1.3% to 5.0% and are payable in semiannual installments at varying amounts through May 1, 2034. The Series 2012B’s net proceeds of $169,991,297 (including a premium of $29,613,138 and after payments of $761,593 in underwriting fees and $590,247 in issuance costs) were used to purchase U.S. government securities. These securities were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the bonds. As a result, Series 2004A bonds were partially defeased and the liability for those bonds related to a date after May 1, 2014 were removed from the financial statements. This refunding decreased total debt service payments over the next 22 years by $28,601,189, resulting in an economic gain (difference between the present values of the debt service requirements on the old and new debt) of $22,439,375.

In August 2012, the District issued $225,000,000 of Wastewater System Revenue Bonds Series 2012A ("Series 2012A"). These bonds were issued pursuant to the June 2012 authorization; in this case for the purpose of constructing, repairing, replacing, and equipping new and existing District wastewater facilities. All funds from this issuance have been expended. These senior bonds have interest rates ranging from 2.5% to 5.3% and are payable in semiannual installments at varying amounts through May 1, 2042.

In December 2011, the District issued $52,250,000 of Wastewater System Revenue Bonds Series 2011B ("Series 2011B"). These bonds were issued pursuant to the August 2008 authorization; in this case for the purpose of constructing, repairing, replacing, and equipping new and existing District wastewater facilities. All funds from this issuance have been expended. These senior bonds have interest rates ranging from 3.0% to 5.0% and are payable in semiannual installments at varying amounts through May 1, 2032.

In January 2010, the District issued $85,000,000 of Taxable Wastewater System Revenue Bonds (Build America Bonds – Direct Pay) Series 2010B ("Series 2010B"). These bonds were issued pursuant to the August 2008 authorization; in this case for the purpose of constructing, repairing, replacing, and equipping new and existing District wastewater facilities. All funds from this issuance have been expended. These senior bonds have an interest rate of 5.9% and are payable in semiannual installments at varying amounts through May 1, 2039. As Build America Bonds under The American Recovery and Reinvestment Act ("ARRA") of 2009, the District receives a subsidy payment from the Federal government equal to a percentage of the interest paid. In fiscal years 2013 and prior, the rate was 35%. Beginning with refund payments processed on March 1, 2013 and annually beginning on October 1, 2013, the IRS has adjusted this rate as part of the sequestration. In both fiscal years 2017 and 2016, the subsidy percentage was 32.6%. In fiscal year 2018 the subsidy percentage is expected to be 32.7%.

In November 2008, the District issued $30,000,000 of Wastewater System Revenue Bonds Series 2008A ("Series 2008A") from the August 2008 authorization for the purpose of providing funds to finance the capital improvement and replacement program. All funds from this issuance have been expended. These senior bonds had interest rates ranging from 5.1% to 5.3% and were payable in semiannual installments at varying amounts through May 1, 2038; however, in December 2015, there was an advance refunding of the Series 2008A bonds. As a result of this refunding, Series 2008A bonds are considered to be defeased. See the explanation for Series 2015B above for further information.

In November 2006, the District authorized and issued $60,000,000 of Wastewater System Revenue Bonds Series 2006C ("Series 2006C") from the February 2004 authorization for the purpose of providing funds to finance the initial phase of its capital improvement and replacement program, including constructing, repairing, and replacing new wastewater facilities. All funds from this issuance have been expended. These senior bonds had interest rates ranging from 4.1% to 5.0% and were payable in semiannual installments at varying amounts through May 1, 2036; however, in December 2015, there was an advance refunding of the Series 2006C bonds. As a result of this refunding, Series 2006C bonds are considered to be defeased. See the explanation for Series 2015B above for further information.

In May 2004, the District authorized and issued $175,000,000 of Wastewater System Revenue Bonds Series 2004A ("Series 2004A") from the February 2004 authorization for the purpose of providing funds to finance the initial phase of its capital improvement and replacement program, including constructing, repairing, and replacing new wastewater facilities. All funds from this issuance have been expended. These senior bonds had interest rates ranging from 2.0% to 5.0% and were payable in semiannual installments at varying amounts through May 1, 2034; however, in November 2012, there was a partial refunding of the Series 2004A bonds. As a result of this refunding, Series 2004A bonds were considered to be partially defeased and the semiannual installments were paid through May 1, 2014. The liability related to Series 2004A after May 1, 2014 has been paid. See the explanation for Series 2012B above for further information.

The revenue bonds do not constitute a legal debt or liability for the District, the State of Missouri, or for any political subdivision thereof and do not constitute indebtedness within the meaning of any constitutional or statutory debt limitation or restriction. Revenue derived from the operations of the Wastewater System is pledged for the retirement of the outstanding Wastewater System Revenue Bonds listed above. Under the provisions of the bond indentures, the District covenants to establish rates for the services of the Wastewater System sufficient to fund operations, maintain reserves, and provide revenues to apply principal and interest on these bonds.

The issuance of the revenue bonds does not obligate the District to levy any form of taxation or to make any appropriation for their payments in any fiscal year. The principal and interest on the bonds are expected to be paid from future wastewater revenues.

Water Pollution Control And Drinking Water Revenue Bonds Payable

In October 2008, the State Environmental Improvement and Energy Resources Authority ("Authority") authorized and issued $69,435,000 of Water Pollution Control and Drinking Water Revenue Bonds (State Revolving Funds Programs) Series 2008A/B ("Series 2008A/B"). The Series 2008A/B bonds provided funds to issue loans to 14 Missouri political subdivisions that used the funds to finance water pollution control and drinking water projects. A portion of the proceeds of the Series 2008A/B bonds issued by the Authority were used to purchase subordinate Participant Revenue Bonds ("Participant Bonds") authorized and issued by the District from the February 2004 authorization in the aggregate principal amount of $40,000,000, the proceeds of which were used for constructing, repairing, and equipping new and existing wastewater facilities. All funds from this issuance have been expended. The District's Participant Bonds have interest rates ranging from 4.0% to 5.7% and are payable in semiannual installments at varying amounts through January 1, 2029.

In November 2006, the Authority authorized and issued $22,105,000 of State Revolving Funds Programs Series 2006B ("Series 2006B"). The Series 2006B bonds provided funds to issue loans to 7 Missouri political subdivisions that used the funds to finance water pollution control and drinking water projects. A portion of the proceeds of the Series 2006B bonds issued by the Authority were used to purchase Participant Bonds authorized and issued by the District from the February 2004 authorization in the aggregate principal amount of $14,205,000, the proceeds of which were used for constructing, repairing, and equipping new and existing wastewater facilities. All funds from this issuance have been expended. The District's Participant Bonds have interest rates ranging from 4.0% to 5.0% and are payable in semiannual installments at varying amounts through July 1, 2027.

In May 2006, the Authority authorized and issued $87,505,000 of State Revolving Funds Programs Series 2006A ("Series 2006A"). The Series 2006A bonds provided funds to issue loans to 13 Missouri political subdivisions that used the funds to finance water pollution control and drinking water projects. A portion of the proceeds of the Series 2006A bonds issued by the Authority were used to purchase subordinate Participant Bonds authorized and issued by the District from the February 2004 authorization in the aggregate principal amount of $42,715,000, the proceeds of which were used for constructing, repairing, and equipping new and existing wastewater facilities. All funds from this issuance have been expended. The District's Participant Bonds have interest rates ranging from 3.5% to 4.5% and are payable in semiannual installments at varying amounts through July 1, 2026.

In May 2005, the Authority authorized and issued $53,060,000 of State Revolving Funds Programs Series 2005A ("Series 2005A"). The Series 2005A bonds provided funds to make loans to 10 Missouri political subdivisions and one Missouri non-profit corporation that were used to finance water pollution control and drinking water projects. A portion of the proceeds of the Series 2005A bonds issued by the Authority were used to purchase subordinate Participant Bonds authorized and issued by the District from the February 2004 authorization in the aggregate principal amount of $6,800,000, the proceeds of which were used for constructing, repairing, and equipping new and existing wastewater facilities. All funds from this issuance have been expended. The District's Participant Bonds have interest rates ranging from 3.0% to 5.0% and are payable in semiannual installments at varying amounts through July 1, 2026.

In May 2004, the Authority authorized and issued $179,780,000 of State Revolving Funds Programs Series 2004B ("Series 2004B"). The Series 2004B bonds provided funds to make loans to 7 Missouri political subdivisions that were used to finance water pollution control projects. A portion of the proceeds of the Series 2004B bonds issued by the Authority were used to purchase subordinate Participant Bonds authorized and issued by the District from the February 2004 authorization in the aggregate principal amount of $161,280,000, the proceeds of which were used to finance the District's three water pollution control construction projects outlined in the agreement. All funds from this issuance have been expended. The District's Participant Bonds have interest rates ranging from 2.0% to 5.3% and are payable in semiannual installments at varying amounts through January 1, 2027.

The Series 2004B, 2005A, 2006A, 2006B, and 2008A/B bonds do not constitute a legal debt or liability for the District, the State of Missouri, or for any political subdivision thereof and do not constitute indebtedness within the meaning of any constitutional or statutory debt limitation or restriction. The issuance of the Series 2004B, 2005A, 2006A, 2006B, and 2008A/B bonds and the Series 2009A, 2010A, 2010C, 2011A, 2013A, 2015A, 2016A, and 2016B direct loans (pages 46 through 52) do not obligate the District to levy any form of taxation or to make any appropriation for their payments in any fiscal year. The principal and interest on the bonds are expected to be paid from future wastewater revenues.

In connection with the District's issuance of the Participant Bonds, which were purchased with the proceeds of the Series 2004B, 2005A, 2006A, 2006B, and 2008A/B bonds, the District participates in the State Revolving Loan Program established by the Missouri Department of Natural Resources ("DNR"). Monies from federal capitalization grants and state matching funds are used to fund a bond reserve account for the participants.

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account and deposited in a bond reserve account, in the District's name, an additional 60% of the expenditure amount for the Series 2004B bonds and 70% for the Series 2005A, 2006A, and 2006B bonds. For the Series 2008A/B bonds, 70% of the entire anticipated borrowed amount was deposited into this bond reserve account at the beginning of the loan versus as the expenditures were reimbursed. Interest earned from this bond reserve account can be used by the District to fund interest payments on the bonds.

On the date of each payment of the principal amount of the District's Participant Bonds, the trustee transfers from this bond reserve account to the master trustee account an amount equal to 60% of the principal payment for the Series 2004B bonds and 70% for the Series 2005A, 2006A, 2006B and 2008A/B bonds.

In accordance with the Master Bond Ordinance and the Series 2004B, 2005A, 2006A, 2006B, and 2008A/B bonds' ordinances, the District's annual net operating revenues from wastewater activities, as defined in the agreement, coupled with investments earnings, must be at least 125% of the current year's principal and interest due on all senior bonds and at least 115% of the current year's principal and interest due on all bonds. At June 30, 2017 and 2016, the District was in compliance with this covenant.

Principal And Interest Requirements On Revenue Bonds Payable

The annual principal and interest requirements to maturity on revenue bonds payable outstanding as of June 30, 2017 are as follows:

	Wastewater System Revenue Bonds Payable/ Water Pollution Control and Drinking Water Revenue Bonds Payable		
Years ending June 30,	**Principal**	**Interest**	**Total**
2018	$ 31,965,000	$ 49,529,044	$ 81,494,044
2019	32,910,000	48,659,417	81,569,417
2020	34,135,000	47,623,606	81,758,606
2021	35,330,000	46,402,605	81,732,605
2022	36,730,000	45,237,980	81,967,980
2023-2027	198,650,000	205,143,637	403,793,637
2028-2032	203,690,000	163,065,487	366,755,487
2033-2037	219,875,000	112,776,211	332,651,211
2038-2042	276,975,000	58,758,239	335,733,239
2043-2046	70,325,000	7,549,250	77,874,250
Total	$ 1,140,585,000	$ 784,745,476	$ 1,925,330,476

Energy Efficiency Leveraged Note Payable

In February 2012, the DNR loaned $223,793 to the District. The Energy Efficiency Leveraged Note Payable bears interest at a rate of 2.5% per annum and is payable through February 1, 2020. The purpose of this note was to finance the design, acquisition, installation, and implementation of energy conservation measures. The principal and interest on this note will be paid from the energy savings from the projects or avoided costs resulting from the projects.

Principal And Interest Requirements On Energy Efficiency Leveraged Note Payable

The annual principal and interest requirements to maturity on the Energy Efficiency Leveraged Note Payable outstanding as of June 30, 2017 are as follows:

Energy Efficiency Leveraged Note Payable

Years ending June 30,	Principal	Interest	Total
2018	$ 17,109	$ 852	$ 17,961
2019	34,863	1,059	35,922
2020	16,163	202	16,365
Total	$ 68,135	$ 2,113	$ 70,248

State Of Missouri Direct Loan Series 2016B

In December 2016, the State of Missouri Direct Loan Program issued to the District an amount totaling $75,500,000 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds are issued from the June 2012 authorization. The District's interest rate is 1.2% and is payable in semiannual installments at varying amounts through July 1, 2037.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2016B

As the District incurs approved capital expenditures, the DNR reimburses the District for the expenditures from the bond proceeds account. The District repays the loan at an interest rate of 1.2% based on the amount that has been borrowed. As of June 30, 2017 the outstanding loan balance was $8,986,258. The payment requirements to maturity will be determined after the debt is fully issued.

State Of Missouri Direct Loan Series 2016A

In December 2016, the State of Missouri Direct Loan Program issued to the District an amount totaling $20,000,000 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds are issued from the June 2012 authorization. The District's interest rate is 1.2% and is payable in semiannual installments at varying amounts through January 1, 2037.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2016A

As the District incurs approved capital expenditures, the DNR reimburses the District for the expenditures from the bond proceeds account. The District repays the loan at an interest rate of 1.2% based on the amount that has been borrowed. As of June 30, 2017 the outstanding loan balance was $146,500. The payment requirements to maturity will be determined after the debt is fully issued.

State Of Missouri Direct Loan Series 2015A

In August 2015, the State of Missouri Direct Loan Program issued to the District an amount totaling $75,000,000 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds are issued from the June 2012 authorization. The District's interest rate is 1.2% and is payable in semiannual installments at varying amounts through January 1, 2035.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2015A

As the District incurs approved capital expenditures, the DNR reimburses the District for the expenditures from the bond proceeds account. The District repays the loan at an interest rate of 1.2% based on the amount that has been borrowed. As of June 30, 2017 the outstanding loan balance was $ 67,148,734. After taking into consideration the $2,488,000 principal paid in fiscal 2017, the balance to be borrowed is $5,363,266. The payment requirements to maturity will be determined after the debt is fully issued.

State Of Missouri Direct Loan Series 2013A

In October 2013, the State of Missouri Direct Loan Program issued to the District an amount totaling $52,000,000 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds were issued from the June 2012 authorization. The District's interest rate is 1.6% and is payable in semiannual installments at varying amounts through July 1, 2034.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2013A

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account. All funds have been drawn on this loan.

The annual principal and interest requirements to maturity on the State of Missouri Direct Loan Series 2013A outstanding as of June 30, 2017 are as follows:

State of Missouri Direct Loan Series 2013A

Years ending June 30,	Principal	Interest	Total
2018	$ 2,190,000	$ 732,251	$ 2,922,251
2019	2,247,000	698,089	2,945,089
2020	2,305,000	663,036	2,968,036
2021	2,365,000	627,076	2,992,076
2022	2,427,000	590,178	3,017,178
2023-2027	13,118,000	2,362,843	15,480,843
2028-2032	14,920,000	1,284,857	16,204,857
2033-2035	8,214,000	192,665	8,406,665
Total	$ 47,786,000	$ 7,150,995	$ 54,936,995

State Of Missouri Direct Loan Series 2011A

In November 2011, the State of Missouri Direct Loan Program issued to the District an amount totaling $39,769,300 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds were issued from the August 2008 authorization. The District's interest rate is 1.5% and is payable in semiannual installments at varying amounts through January 1, 2034.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2011A

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account. All funds have been drawn on this loan.

The annual principal and interest requirements to maturity on the State of Missouri Direct Loan Series 2011A outstanding as of June 30, 2017 are as follows:

State of Missouri Direct Loan Series 2011A

Years ending June 30,	Principal	Interest	Total
2018	$ 1,704,000	$ 536,086	$ 2,240,086
2019	1,747,000	510,025	2,257,025
2020	1,792,000	483,304	2,275,304
2021	1,838,000	455,891	2,293,891
2022	1,884,000	427,778	2,311,778
2023-2027	10,166,000	1,691,600	11,857,600
2028-2032	11,528,000	873,491	12,401,491
2033-2034	5,033,300	96,233	5,129,533
Total	$ 35,692,300	$ 5,074,408	$ 40,766,708

State Of Missouri Direct Loan Series 2010C

In December 2010, the State of Missouri Direct Loan Program issued to the District an amount totaling $37,000,000 for the purpose of improving, renovating, repairing, replacing and equipping the District's Wastewater System. The principal and interest on the bonds are expected to be paid from future wastewater revenues and the bonds were issued from the August 2008 authorization. The District's interest rate is 1.7% and is payable in semiannual installments at varying amounts through January 1, 2031.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2010C

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account. All funds have been drawn on this loan.

The annual principal and interest requirements to maturity on the State of Missouri Direct Loan Series 2010C outstanding as of June 30, 2017 are as follows:

State of Missouri Direct Loan Series 2010C

Years ending June 30,	Principal	Interest	Total
2018	$ 1,705,000	$ 460,969	$ 2,165,969
2019	1,750,000	432,655	2,182,655
2020	1,795,000	403,590	2,198,590
2021	1,842,000	373,783	2,215,783
2022	1,890,000	343,192	2,233,192
2023-2027	10,211,000	1,228,590	11,439,590
2028-2031	9,168,000	345,527	9,513,527
Total	$ 28,361,000	$ 3,588,306	$ 31,949,306

State Of Missouri Direct Loan Series 2010A

In January 2010, the State of Missouri's Direct Loan Program - ARRA issued to the District an amount totaling $7,980,700 for the construction, improvement, renovation, repair, replacement and equipping of its wastewater system, under the authority of and in full compliance with the District's Charter ("Plan") and the bonds were issued from the August 2008 authorization. The District's interest rate is 1.5% and is payable in semiannual installments at varying amounts through July 1, 2031.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2010A

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account. All funds have been drawn on this loan.

The annual principal and interest requirements to maturity on the State of Missouri Direct Loan Series 2010A outstanding as of June 30, 2017 are as follows:

State of Missouri Direct Loan Series 2010A

Years ending June 30,	Principal	Interest	Total
2018	$ 373,300	$ 90,717	$ 464,017
2019	380,900	85,164	466,064
2020	388,700	79,498	468,198
2021	396,600	73,717	470,317
2022	404,600	67,817	472,417
2023-2027	2,149,900	246,319	2,396,219
2028-2032	2,128,400	79,808	2,208,208
Total	$ 6,222,400	$ 723,040	$ 6,945,440

State Of Missouri Direct Loan Series 2009A

In October 2009, the DNR loaned $23,000,000 to the District. The State of Missouri Direct Loan Series 2009A note bears interest at a rate of 1.5% per annum and is payable through January 1, 2030. The purpose of this note was to finance the designing, constructing, improving, renovating, repairing, replacing and equipping of new and existing sewer facilities within the District. The principal and interest on the note are expected to be paid from future wastewater revenues and the note was issued from the August 2008 authorization.

Principal And Interest Requirements On State Of Missouri Direct Loan Series 2009A

As the District incurred approved capital expenditures, the DNR reimbursed the District for the expenditures from the bond proceeds account. All funds have been drawn on this loan.

The annual principal and interest requirements to maturity on the State of Missouri Direct Loan Series 2009A outstanding as of June 30, 2017 are as follows:

State of Missouri Direct Loan Series 2009A

Years ending June 30,	Principal	Interest	Total
2018	$ 1,098,500	$ 236,045	$ 1,334,545
2019	1,123,900	219,915	1,343,815
2020	1,149,900	203,411	1,353,311
2021	1,176,500	186,526	1,363,026
2022	1,203,700	169,251	1,372,951
2023-2027	6,449,300	572,803	7,022,103
2028-2030	4,238,700	109,330	4,348,030
Total	$ 16,440,500	$ 1,697,281	$ 18,137,781

In accordance with the Direct Loan Series 2009A, 2010A, 2010C, 2011A, 2013A, 2015A, 2016A, and 2016B ordinances, the District's annual net operating revenues from wastewater activities, as defined in the agreement, coupled with investments earnings must be at least 115% of the current year's principal and interest due on all bonds. At June 30, 2017 and 2016, the District was in compliance with this covenant.

Wastewater System Cash And Investments

The following accounts have been established in accordance with bond ordinances and financing agreements that require receipts generated from operations be segregated and certain reserve accounts be established:

Revenue Fund

The Revenue Fund will be used for the purpose of depositing wastewater and stormwater operating revenues, providing funds to pay for expenses related to the operation and maintenance of the District, and fulfilling Sinking Fund requirements in accordance with the bond ordinances.

Sinking Fund

The bond ordinances provide for deposits to and the use of monies in the Sinking Fund to be used for the sole purpose of principal and interest payments on the bonds. Sufficient monies shall be paid in periodic installments from the Revenue Fund.

Debt Service Fund

The Debt Service Fund shall be used by the Trustee for the sole purpose of paying the principal and interest on the bonds, as and when the same become due.

Debt Service Reserve Fund

After initial deposit of the amount required pursuant to the bond ordinances and financing agreements of the Series 2004A, 2006C, 2008A, 2010B, 2011B, 2012A, and 2013B bonds, monies in the Debt Service Reserve Fund shall be disbursed and expended by the District solely for the payment of the principal and interest on the bonds and notes to the extent of any deficiency in the Debt Service Fund for such purpose. The District may disburse and expend monies from the Debt Service Reserve Fund for such purpose immediately. As of June 30, 2017 and 2016, cash and investments in the Debt Service Reserve Fund totaled $49,413,496 and $49,575,170, respectively.

Series 2016C was issued without a debt service requirement.

Series 2015B was issued without a debt service requirement and at that time $8,945,557 in excess debt reserves along with part of the Series 2015B proceeds were used to advance refund Series 2006C and Series 2008A.

Special Participant Bond Reserve Account

For the Series 2004B, 2005A, 2006A, 2006B, and 2008A/B bonds, the DNR deposited into the Special Participant Bond Reserve Account, amounts in accordance with the bond ordinances, which shall be disbursed and expensed by the District solely for the payment of the principal and interest on the Participant Bonds to the extent of any deficiency in the Sinking Fund for such purpose. At June 30, 2017 and 2016, cash and investments in the Special Participant Bond Reserve Account held on behalf of the District totaled $95,878,616 and $104,751,185, respectively. Monies in this account are not considered to be District funds. However, interest earnings on this account are used by the District to reduce interest payments on the bonds outstanding.

Renewal And Extension Fund

All sums accumulated and retained in the Renewal and Extension Fund shall be first used to prevent default in the payment of principal and interest on the bonds when due and shall then be applied by the District for purposes pursuant to the trust indenture. No monies have been deposited into this account at June 30, 2017.

Project Fund

The Project Funds for all bond issuances outstanding will be used for the purpose of providing monies to pay project costs. The proceeds from the bonds and notes, after a deposit into the Debt Service Reserve Fund for the amounts required pursuant to the bond ordinances and note agreements of Series 2004A, 2006C, 2008A, 2010B, 2011B, 2012A, and 2013B bonds, shall be deposited into the Project Fund. At June 30, 2017 and 2016, cash and investments in the Project Fund totaled $120,226,233 and $92,563,751, respectively.

Rebate Fund

The bond ordinances provide for the creation of a Rebate Fund into which shall be deposited such amounts as are required to be deposited therein pursuant to the arbitrage instructions regarding the calculation and payment of rebate amounts due. The District does not have any rights in or claims to such money; provided, however, any funds remaining in the Rebate Fund after redemption and payment of all bonds and payment of any rebatable arbitrage amount, or provision having been made therefore, shall be remitted to the District. At June 30, 2017 and 2016, cash and investments in the Rebate Fund totaled $227,320 and $228,797, respectively.

Administrative Fee Fund

The Administrative Fee Fund will be used for the payment of the Trustee's fees and other administrative fees pursuant to the note agreement. The Trustee has the ability to immediately withdraw the fee amounts when due. Monies held in this account shall not be invested.

Pledged Revenues

The District pledges revenues to ensure the repayment of all outstanding revenue bonds. These bonds' proceeds are used for the District's capital improvement and replacement program and their repayment comes from, and is collateralized by, the District's wastewater revenues. These revenues are pledged through 2046 at an approximate amount of $1.9 billion. The proportion of future pledged revenues to future wastewater revenues is not estimable as annual total revenues fluctuate. Principal and interest paid out during fiscal year 2017 was $89.4 million with pledged revenues of $167.1 million. This provided a coverage ratio of 1.9 and represented 50.1% of all net operating revenues.

7. Pension Plan

General Information About The Pension Plan

Pension Plan Description. The Metropolitan St. Louis Sewer District Employees' Pension Plan ("Pension Plan") is a noncontributory single employer defined benefit plan providing retirement benefits as well as death and disability benefits. As a condition of employment, all full-time employees of the District commencing service prior to January 1, 2011, were eligible to be covered by the Pension Plan. As of January 1, 2011, the Pension Plan was frozen to new employees. Instead, new employees of the District may participate in The Metropolitan St. Louis Sewer District Defined Contribution Plan ("DC Plan") and/or The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust. Current employees with less than ten years of service on January 1, 2011 could also voluntarily elect to transfer from the Pension Plan and enter the DC Plan.

Benefits Provided. All benefits vest after five years of credited service. Members retiring at or after age 65 with five or more years credited service are entitled to a pension benefit. The Pension Plan permits early retirement with reduced benefits beginning at age 55 if the member has completed five years of employment. Ordinance No. 10664 provides for unreduced retirement benefits to any member whose combined age and term of service is equal to 75.

Effective August 1, 2004, Ordinance No. 11781 amended the Pension Plan to change the benefit formula to 1.7% of final average earnings plus 0.4% of final average earnings that are in excess of covered earnings multiplied by the period of years and months of credited service not to exceed 35 years without including accrued sick leave. For vested employees, sick leave is paid out at 1.25% per year of service multiplied by the amount of the unused accrued sick leave remaining at the employee's current rate of pay, up to a maximum of $50,000. Also, the Pension Plan was amended to provide the retiring member with a 10% partial lump sum payment option. The balance of the distribution will be paid in accordance with any one of the other payment options available under the Pension Plan.

The retirement benefit payable to a member who retires after the normal retirement date is the greater of a) the benefit that would have been payable on the normal retirement date plus a special annual retirement benefit provided by the accumulated value, at 4% per annum interest, of the monthly benefit that would have been received prior to the postponed retirement date or b) the benefit determined as of the postponed retirement date under the normal formula.

Effective August 27, 2011, Ordinance No. 13288 amended the Pension Plan to include the following: “Upon termination or complete discontinuance of contributions under the Plan, the rights of all Members to benefits accrued to the date of such termination or discontinuance shall be non-forfeitable, to the extent then funded.”

Amounts in participants’ accounts are distributed upon retirement, death, disability, or termination of employment. The normal form of retirement benefit is either a lump sum payment or equal monthly installments.

The Pension Plan reports financial data on a calendar year basis and issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing: The Metropolitan St. Louis Sewer District, 2350 Market Street, St. Louis, MO 63103-2555.

Employees Covered by Benefit Terms. At December 31, 2016 and 2015, the financial reporting period of the Pension Plan, the following employees were covered by the benefit terms:

	For the Years Ended December 31,		
	2016	**2015**	**Increase (Decrease)**
Active plan members	626	665	(39)
Retirees and beneficiaries currently receiving benefits	717	691	26
Terminated members entitled to receive benefits	174	175	(1)
Total	1,517	1,531	(14)

Required Employer Contributions. The District’s employees do not contribute to the Pension Plan. Ordinances establishing the Pension Plan provide for actuarially determined annual contributions, paid solely by the District, that are sufficient to pay benefits when due. The Entry Age Normal actuarial funding method is used to determine contributions.

Contributions of $11,236,828 and $10,096,075, excluding certain professional fees paid by the District, were made to the Pension Plan during the District’s fiscal years ended June 30, 2017 and 2016, respectively. These contributions were made in accordance with actuarially determined contribution requirements based on actuarial valuations performed at December 31, 2016 and 2015, respectively.

Net Pension Liability

The net pension liability was measured as of December 31, 2016 and 2015 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions. The total pension liability in the December 31, 2016 and 2015 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50 percent
Salary Increases	4.25 percent, average, including inflation
Investment Rate of Return	7.00 percent, net of pension plan investment expense, including inflation

Effective December 31, 2016, for current employees, mortality rates were based on the RP-2014 Employees Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2016 improvement scale. For the December 31, 2015 valuation, the assumption was the RP-2000 Employees Mortality Table, male and female rates, projected five years from the valuation date using Scale AA. For retirees, the RP-2014 Healthy Annuitant Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2016 improvement scale was assumed for the December 31, 2016 valuation while the RP-2000 Healthy Annuitant Mortality Table, male and female rates, projected five years from the valuation date using Scale AA was assumed for December 31, 2015. For disabled lives, the RP-2014 Disabled Mortality Table, male and female rates, was utilized for the current valuation and the RP-2000 Disabled Mortality Table, male and female rates, was the assumption in the previous valuation.

The actuarial assumptions are based on prior and current year experiences.

Long-Term Expected Rate of Return. The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions at December 31, 2016 and 2015 are as follows:

	December 31, 2016	
Asset Class	**Target Allocation**	**Long-Term Expected Arithmetic Real Rate of Return**
Large Cap US Equity	20.0%	5.1%
Small Cap US Equity	6.0%	6.3%
Developed International Equity	10.0%	5.5%
Emerging Markets Equity	4.0%	7.0%
Domestic Core Plus Fixed Income	26.0%	1.0%
Global Fixed Income	9.0%	0.7%
Absolute Return/HFOF	15.0%	2.8%
Real Estate	10.0%	4.3%
Total	100.0%	

	December 31, 2015	
Asset Class	**Target Allocation**	**Long-Term Expected Arithmetic Real Rate of Return**
Large Cap US Equity	20.0%	7.1%
Small Cap US Equity	6.0%	8.1%
Developed International Equity	10.0%	7.7%
Emerging Markets Equity	4.0%	9.9%
Domestic Core Plus Fixed Income	26.0%	1.2%
Global Fixed Income	9.0%	1.3%
Absolute Return/HFOF	15.0%	3.2%
Real Estate	5.0%	5.4%
Real Assets	5.0%	3.5%
Total	100.0%	

Discount Rate. The discount rate used to measure the total pension liability at December 31, 2016 and 2015, was 7.00 percent. The Pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return.

Changes in Net Pension Liability for the Year Ending December 31, 2016

	Increase (Decrease)		
Changes in Net Pension Liability	**Total Pension Liability (a)**	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) - (b)**
Balances as of December 31, 2015	$ 296,812,242	$ 244,212,239	$ 52,600,003
Changes for the year:			
Service cost	5,106,625	—	5,106,625
Interest	20,609,223	—	20,609,223
Effect of economic/demographic gains or losses	(882,851)	—	(882,851)
Effect of assumptions changes or inputs	11,664,881	—	11,664,881
Benefit payments	(15,260,904)	(15,260,904)	—
Employer contributions	—	10,145,562	(10,145,562)
Net investment income	—	11,913,134	(11,913,134)
Balances as of December 31, 2016	$ 318,049,216	$ 251,010,031	$ 67,039,185

Changes in Net Pension Liability for the Year Ending December 31, 2015

	Increase (Decrease)		
Changes in Net Pension Liability	**Total Pension Liability (a)**	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) - (b)**
Balances as of December 31, 2014	$ 290,411,812	$ 250,515,821	$ 39,895,991
Changes for the year:			
Service cost	5,253,091	—	5,253,091
Interest	20,198,502	—	20,198,502
Effect of economic/demographic gains or losses	(4,576,597)	—	(4,576,597)
Benefit payments	(14,474,566)	(14,474,566)	—
Employer contributions	—	10,059,004	(10,059,004)
Net investment income	—	(1,888,020)	1,888,020
Balances as of December 31, 2015	$ 296,812,242	$ 244,212,239	$ 52,600,003

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the net pension liability calculated using the 7.00 percent discount rate, as well as what the District's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00 percent) or 1-percentage-point higher (8.00 percent) than the current rate:

	December 31, 2016		
	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 103,919,255	$ 67,039,185	$ 35,785,992

	December 31, 2015		
	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 85,662,163	$ 52,600,003	$ 24,315,305

Pension Plan Fiduciary Net Position. Fiduciary net position is the market value of all plan assets. Net pension liability is the plan's total pension liability less its fiduciary net position, i.e., the plan's unfunded accrued liability.

Pension Expense And Deferred Outflows Of Resources And Deferred Inflows Of Resources Related To Pensions

For the years ended June 30, 2017 and 2016, the District recognized pension expense of $6,810,309 and $3,571,798, respectively, after accounting for all deferred outflows and inflows of resources. The District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	June 30, 2017		June 30, 2016	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ —	$ 4,604,518	$ —	$ 5,711,868
Changes of assumptions	11,290,949	—	3,814,183	—
Net difference between projected and actual earnings	19,776,909	—	21,823,418	—
Contributions made subsequent to measurement date	6,597,928	—	5,506,662	—
Total	$ 37,665,786	$ 4,604,518	$ 31,144,263	$ 5,711,868

In the years ending June 30, 2017 and 2016, amounts currently reported as deferred outflows of resources, $6,597,928 and $5,506,662, respectively, related to the District's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the years ended June 30, 2018 and 2017, respectively.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

	Net Deferrals of Resources
Year ended June 30,:	
2018	$ 9,176,693
2019	9,083,063
2020	6,954,152
2021	1,249,432
	$ 26,463,340

Payable To The Pension Plan

At June 30, 2017 and 2016, the District did not have outstanding required contributions to the pension plan.

8. Other Retirement Plans

Deferred Compensation Plan and Trust

The District offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust ("Plan"), available to all District employees, permits them to defer a portion of their salary up to Internal Revenue Code limits. The District does not contribute to the Plan except where mandated by the Internal Revenue Service to compensate participants for lost deferral contributions. The deferred compensation is not available to employees until termination, retirement, death, disability or due to financial hardship as defined by the Plan.

The Plan was amended and restated to comply with the Economic Growth and Tax Relief Reconciliation Act of 2001 (“Act”). The Act made significant changes to Section 457(b) of the Internal Revenue Code of 1986, as previously amended. The Plan assets are held in trust for the exclusive benefit of participants and their beneficiaries under Section 1448 of the Small Business Job Protection Act of 1996. As a result, the assets and liabilities of the Plan are not included in the accompanying financial statements.

The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing: The Metropolitan St. Louis Sewer District, 2350 Market Street, St. Louis, MO 63103-2555.

Defined Contribution Plan

The Metropolitan St. Louis Sewer District Defined Contribution Plan (“DC Plan”) was established by the District’s Board of Trustees, through Ordinance 13180, which became effective January 1, 2011. The following full time employees are eligible to participate in the DC Plan: (i) employees first hired on or after January 1, 2011, and (ii) employees hired prior to January 1, 2011 who elected to terminate participation in The Metropolitan St. Louis Sewer District Employees’ Pension Plan (“Pension Plan”), effective as of April 1, 2011, in accordance with the provisions of such Pension Plan, and (iii) employees rehired on or after January 1, 2011 who are not eligible to accrue benefits under the Pension Plan. An employee shall become a participant in the DC Plan on the first day on which he or she performs an hour of service for the District.

The District’s Board of Trustees, primarily to improve benefits to members, amends the DC Plan in all its respects. A pension committee consisting of two members of the District’s Board of Trustees, two elected employee members and four members of the District’s management staff administer the DC Plan. A committee of the District’s Board of Trustees, with the aid of an investment advisor, reviews and evaluates the DC Plan’s investments and the related rates of return on a periodic basis.

This DC Plan is intended to provide a means whereby the District may provide retirement benefits to eligible employees and encourage such employees to establish a regular method of savings, thereby providing a measure of financial security for such employees and their beneficiaries upon retirement or in the event of death or disability.

Employer Basic Contributions: For each payroll period, the District contributes an amount equal to 7% of the covered compensation earned during such period by each participant entitled to an allocation of such contribution.

Employer Matching Contributions: For each payroll period, the District contributes an amount equal to 50% of the covered compensation of such participant withholding as an annual deferral (as defined in The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust) pursuant to The Metropolitan St. Louis Sewer District Deferred Compensation Plan and Trust; provided that, before-tax contributions in excess of 4% of the covered compensation of the participant for the payroll period shall not be considered for purposes of Employer Matching Contributions. Employer Matching Contributions shall be up to the maximum amount of compensation that may be taken into account for the DC Plan year.

In no event shall the sum of the employer contributions and employee contributions allocated to the account of a participant for the DC Plan year exceed the lesser of:

(a) The amount specified in the applicable Internal Revenue Code, as adjusted annually for any applicable increases in the cost of living.

(b) 100% of the participant's compensation for such year.

The compensation limit referred to in (b) shall not apply to any contribution from medical benefits after separation from service.

The District's contributions to the DC Plan amounted to $1,392,919 and $1,291,061 for the years ended June 30, 2017 and 2016, respectively. Forfeitures were $76,516 and $45,621, for the years ended June 30, 2017 and 2016, respectively, and there were $31,512 and $22,655 of liabilities outstanding as of June 30, 2017 and 2016, respectively.

Vesting: As of any time before the normal retirement age of a participant, the first day of the month coinciding with or next following a person's sixty-fifth birthday and completion of sixty months of continuous service (other than upon death or permanent disability), the vested percentage of the amounts credited to the participant's employer basic contributions account shall be determined in accordance with the following schedule:

Months Of Continuous Service	Vested(Non-Forfeitable) Percentage
Less than 12	0%
12 but less than 24	20%
24 but less than 36	40%
36 but less than 48	60%
48 but less than 60	80%
60	100%

The Metropolitan St. Louis Sewer District Defined Contribution Plan issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing: The Metropolitan St. Louis Sewer District, 2350 Market Street, St. Louis, MO 63103-2555.

9. Post-Employment Benefits Other Than Pensions

Plan Description

The District's only post-employment benefit provides a single-employer defined benefit health care plan ("Plan") to employees who retire from the District on or after age 62 with five years of service or whose age plus years of service equal 75 points ("Rule of 75") as part of a total compensation package effective August 1, 2004 for general employees and, with respect for union members, the later of August 1, 2004 or the date of union ratification of a Memorandum of Understanding with respect to this Plan modification. The District offers two medical plan options, a traditional open access plan and a high deductible health plan, and both plans offer wellness rates for those employees who qualify.

The District pays the same amount of the monthly group health insurance premium for the qualified retiree as it would for an active employee qualifying for the wellness rates until the retiree becomes eligible for Medicare at age 65. In fiscal year 2017 the amount the District paid was 85% to 91% of the retiree only premium depending on the plan selected by the retiree. In addition, there is a closed group of disabled former employees who receive life insurance coverage from the District.

The District periodically contracts for an actuarial valuation of the Plan and the latest actuarial valuation was performed as of July 1, 2015. While the actuarial report has the February 2015 monthly medical premium rates, updated rates received from the Human Resources Department for retirees, which are the same rates for active employees, beginning February 2017 are as follows:

Premiums for retirees selecting the traditional plan are as follows:

Coverage Tier	Monthly Premium
Retiree*	$684.69
Retiree + Spouse	$1,458.58
Retiree + Child(ren)	$1,325.27
Family	$2,021.51

*The District pays approximately 85% to 91% of the retiree's premium for a retiree who retires after age 62 with five years of service or after attaining 75 points. The retiree pays the remaining percentage of the individual retiree premium above plus 100% of the spousal, children or family premium incremental increases.

The District's annual other post-employment benefit ("OPEB") cost (expense) is calculated based on the annual required contribution ("ARC") of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, and in conjunction with Plan benefits currently in force. The actuarial valuations have been determined using estimated data provided by the District in combination with assumptions on the probability of future events, while also keeping an eye on long-term viability. These valuations are subject to continual revision as future actuarial measurements may differ significantly from current measurements due to the realization of new estimates and factors.

The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and the amortization of any unfunded actuarial accrued liabilities. The District's annual OPEB cost for fiscal year 2017 and 2016 and the related information are as follows:

	2017	2016
Amortization of Past Service Cost	$ 963,300	$ 935,300
Normal Cost	1,524,000	1,524,000
Interest to End of Fiscal Year	93,300	92,200
Annual Required Contribution ("ARC")	2,580,600	2,551,500
Interest on Net OPEB Obligation	262,630	223,820
Adjustment to ARC	(266,826)	(220,586)
Net Annual OPEB Cost	2,576,404	2,554,734
Actual Contribution	(1,516,800)	(1,519,800)
Increase in Net OPEB Obligation	1,059,604	1,034,934
Net OPEB Obligation - Beginning of Year	7,003,477	5,968,543
Net OPEB Obligation - End of Year	$ 8,063,081	$ 7,003,477

The Plan was established by District Ordinance which assigned the authority to establish and amend Plan benefit provisions to the District.

The contribution requirements of the District and Plan members are established and may be amended by the District. The Plan does not issue a publicly available report.

Trend Information:

Fiscal Year	Net Annual OPEB Cost	Actual Contribution	Percentage of Net Annual OPEB Cost Contributed	Net OPEB Obligation
2017	$ 2,576,404	$ 1,516,800	58.9	$ 8,063,081
2016	2,554,734	1,519,800	59.5	7,003,477
2015	2,474,689	1,573,400	63.6	5,968,543

As of June 30, 2017 and 2016, the Plan was not funded. The actuarial accrued liability for benefits as of July 1, 2015, the latest actuarial valuation, was approximately $25,308,300, and there were no assets, resulting in an unfunded actuarial accrued liability (“UAAL”) of approximately $25,308,300. The covered payroll (annual payroll of active employees covered by the Plan) in 2015 was approximately $66,958,077, and the ratio of the UAAL to covered payroll was 37.8%.

The Schedule of Funding Progress, presented as required supplementary information following these notes to financial statements, presents trend information about whether the actuarial accrued liability for benefits is increasing or decreasing over time.

Actuarial funding calculations of the Plan reflect a long-term perspective. The Plan’s actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future.

Significant actuarial assumptions used in the valuation are as follows:

Latest Valuation Date:	July 1, 2015
Actuarial Cost Method:	Projected Unit Credit
Discount Rate:	3.75% per annum
Amortization Method:	Level Percentage of Payroll Amount, Open
Amortization Period:	30 years
Inflation Rate:	2.50%
Payroll Growth Rate:	3.00%
Investment Rate of Return:	3.75% annual returns, net of both administrative and related investment expenses
Health Cost Trend Assumption:	Getzen Trend Model – 6.90% graded to 4.50% over 67 years

Medical Trend:

Year	Medical	Year	Medical
2015	6.90%	2045	5.90%
2016	6.40	2050	5.80
2017	5.60	2055	5.60
2018	5.30	2060	5.50
2019	5.30	2065	5.10
2020	5.30	2070	4.60
2025	5.30	2075	4.60
2030	6.80	2080	4.60
2035	6.80	2082+	4.50
2040	6.20		

The healthcare trends used in the valuation are based on long-term healthcare trends generated by the Getzen Trend Model ("Model"). The Model is the result of research sponsored by the Society of Actuaries and completed by a committee of economists and actuaries. This Model is the current industry standard for projecting long-term medical trends. Inputs to the Model are consistent with the assumptions used in deriving the discount rate used in the valuation.

Payroll Inflation	3.00% per annum
Healthy Mortality	RP 2000 Mortality Table (employee and healthy annuitant tables), projected 5 years from the valuation date using Scale AA.
Disabled Mortality	RP 2000 Disabled Mortality Table

Termination Of Employment:

Select Rates (0 to 4 years of service)		**Ultimate Rates (after 4 years of service)**	
Years Of Service	**Rate**	**Attained Age**	**Rate**
0	20.00%	20	5.50%
1	12.00	30	3.70
2	7.50	40	1.10
		50+	0.00

Select Rates based on years of service.
Ultimate Rates based on attained age.
Ultimate Rates are from the Sarason T-1 Table.

Retirement - Rates Vary By Age

Age	**Before 75 Points**	**After 75 Points**
55	1.0%	10.0%
56	2.0	10.0
57	2.0	10.0
58	2.0	10.0
59	3.0	10.0
60	4.0	15.0
61	5.0	15.0
62	20.0	35.0
63	10.0	25.0
64	20.0	25.0
65	100.0	100.0

Disability

Age	Percent Becoming Disabled
20	0.056%
30	0.064
40	0.102
50	0.311

Future Retiree Coverage: 90% of eligible employees retiring prior to age 65 are assumed to elect medical coverage under the Plan.

Future Dependent Coverage: 25% elect spouse coverage and it is assumed that no dependent children are covered in retirement.

10. Self-Insurance Programs

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 has established a risk management program and retains the risk related to its obligation to provide workers' compensation and medical and hospitalization benefits to its employees; and to pay water backup claims to its customers. The estimated liabilities for payment of incurred (both reported and unreported) but unpaid claims relating to these matters are included as a component of current deposits and accrued expenses, and as such are expected to be paid within one year of the date of the Statement of Net Position. At June 30, 2017 and 2016, these liabilities amounted to $4,461,069 and $4,076,994, respectively.

The claims liabilities reported are based on the requirements of GASB Statement No. 10, *Accounting and Financial Reporting for Risk Financing and Related Insurance Issues*, which requires that a liability for claims be reported if information obtained prior to the issuance of the financial statements indicates it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. Changes in the balance of claims liabilities during fiscal 2017 and 2016 were as follows:

	2017	2016	2015
Liability - Beginning of Year	$ 4,076,994	$ 4,317,384	$ 2,923,884
Current year claims and changes in estimates	17,648,177	21,213,424	15,852,729
Claim payments	(17,264,102)	(21,453,814)	(14,459,229)
Liability - End of Year	$ 4,461,069	$ 4,076,994	$ 4,317,384

The District obtains periodic funding valuations from the third-party administrators managing the self-insurance programs and adjusts the charges as required to maintain the appropriate level of estimated claims liability. The District also maintains excess liability insurance coverage for workers' compensation and medical and hospitalization claims; general liability; and water backup damage to customers' property.

The District purchases commercial insurance for all other risks of loss. Settled claims have not exceeded this commercial coverage in any of the past three years.

11. Closure And Post-Closure Care Costs

State and federal laws and regulations require the District to place a final cover on its Prospect Hill Reclamation Project landfill site when it stops accepting waste and to perform certain maintenance and monitoring functions at the site for 30 years after closure. Although closure and post-closure care costs will be paid only near or after the date that the landfill stops accepting waste, the District reports a portion of these closure and post-closure care costs as an operating expense in each fiscal year. The $508,422 and $821,732 reported as landfill closure and post-closure care liabilities at June 30, 2017 and 2016, respectively, represent the cumulative amounts reported at fiscal year-end and represent 60.9% and 100% of the estimated closure and post-closure care costs of the landfill for fiscal years ended June 30, 2017 and 2016, respectively. These amounts are based on what it would cost to perform all closure and post-closure care in 2017 and 2016, respectively.

The remaining disposal life estimate was calculated in 2009 and was estimated at eight years factoring in a future annual average disposal rate of 96,500 cubic yards. It was noted in the 2009 Black and Veatch study that this life could be extended further if the actual disposal rate is less than projected or alternative uses and off-site beneficial options for the incinerator ash are later developed. Since the actual average disposal rate has been less than 96,500 cubic yards, the landfill is not at capacity and MSD expects the landfill to be in use for another 10-15 years and the total capacity of the landfill and the available space was adjusted in 2017. The District will continue to accrue the remaining estimated cost of closure and post-closure care annually.

The District is required to demonstrate that it has the financial capability to close the landfill to the State of Missouri through the use of a financial test as specified in 10 CSR 80-2.030(4)(D)6 of the Missouri Solid Waste Management Rules. The District has complied with the State's requirement. The District recognizes that estimates of closure costs may change as a result of inflation, deflation, and/or changes in technology and applicable laws and regulations. If closure cost estimates change, the liability currently reported on the Statement of Net Position will be adjusted accordingly.

12. Commitments And Contingencies

United States And State Of Missouri V. Metropolitan St. Louis Sewer District; In The United States District Court For The Eastern District Of Missouri; Case No. 07-1120.

A lawsuit was filed by the Department of Justice on behalf of the United States Environmental Protection Agency ("EPA") for various alleged violations of the Clean Water Act. The suit was based on violations of the Clean Water Act as a result of overflows in the combined and sanitary sewer systems causing pollutants to reach waters of the United States. There were other counts involving violations of permit conditions. The District had been the subject of several investigatory actions by EPA over the past several years. Negotiations had been ongoing with the EPA and the Missouri Department of Natural Resources ("DNR") regarding the sewer collection system, both the combined system and the sanitary system, for several years. The Missouri Coalition for the Environment ("MCE") gave Notice of Intent to Sue the District under the citizen suit provisions of the Clean Water Act. EPA and the DNR then brought the suit in June 2007, and MCE moved to intervene. Intervention was granted in August 2007. In October 2007, the Court granted the District's motion to dismiss all of the plaintiffs' claims for civil penalties attributable to any and all of the District's alleged violations of the Clean Water Act that occurred before June 11, 2002. Also, the suit alleged that the District did not have an approved Long-Term Control Program ("LTCP") for the combined system. The District had been working on these issues for several decades and had asked voters to approve bonds and rate increases to rehabilitate and maintain the collection system. As required by its Charter, the District had increased rates which continued to fund the improvements sought by the EPA and the DNR. In September 2008, the Judge put in place a Stay while the parties mediated the issues. Pursuant to MSD Ordinance No. 13277, MSD executed the Consent Decree ("CD") on July 15, 2011. The CD was lodged with the court on August 4, 2011. An extended public comment period ended October 10, 2011.

On April 27, 2012, the Court approved and entered the decree, thus concluding the litigation of this lawsuit. Although this litigation matter has concluded, MSD continues to work diligently to implement the CD.

The CD requires the District to spend approximately $4.7 billion, in 2010 dollars, over a 23-year implementation period. Throughout this period improvements will be made to the District's separate sewer system, combined sewer system, and wastewater treatment plants. The District continues to comply with the CD. On June 1, 2011, the State of Missouri approved Chapter 11, Chapter 12, and Appendix Q of the District's Combined Sewer Overflow Long-Term Control Plan Updated Report, dated February 2011.

Flooding Cases

The remaining flooding cases related to the September 14, 2008 rain event are being covered by the District's insurance carrier, with a reservation of rights. These cases appear to have a very low risk of liability to the District.

Other Commitments and Contingencies

The District is a defendant in various other matters of litigation. Of these matters, management and District's legal counsel do not anticipate any material effect on the June 30, 2017 and 2016 financial statements.

The District has entered into construction and other contracts amounting to approximately $488,000,000 at June 30, 2017, and through the audit report date. The District had $947,500,000 in revenue bonds authorized by the voters but unissued as of June 30, 2017. These funds were sought to enable the District to comply with federal and state clean water requirements.

13. Restricted Net Position

The Statements of Net Position report $135,259,059 and $136,546,766 of restricted net position at June 30, 2017 and 2016, respectively, of which $79,940,036 and $81,182,753 are restricted due to enabling legislation, as of June 30, 2017 and 2016, respectively.

14. Segment Information

The District issued wastewater revenue bonds to finance wastewater infrastructure projects. The District accounts for both wastewater and stormwater activities in a single enterprise fund, but investors in those bonds rely solely on the revenue generated by the wastewater activities for repayment. Fiscal year 2017 and 2016 summary financial information for each business segment is presented below.

A segment is an identifiable activity reported as a stand-alone entity for which one or more revenue bonds are outstanding. A segment has a specifically identifiable revenue stream pledged in support of the revenue bonds and has related expenses, gains and losses, assets and liabilities, and deferred inflows and outflows of resources that are required by external parties to be accounted for separately. The wastewater system is the only reportable segment that meets the requirements of GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*. The stormwater system is reported on for informational purposes only.

Financial information as of and for the years ended June 30, 2017 and 2016 of the District's Wastewater Segment is as follows:

WASTEWATER SEGMENT
STATEMENTS OF NET POSITION

	June 30, 2017	June 30, 2016
Assets		
Current Assets		
Unrestricted Current Assets		
Cash and cash equivalents	$ 21,932,648	$ 25,577,264
Investments	264,399,511	157,349,756
Sewer service charges receivable, less allowance of $56,490,989 in 2017 and $55,537,161 in 2016	53,517,987	49,733,852
Unbilled sewer service charges receivable	26,514,670	24,607,682
Property taxes receivable	(27,512)	—
Accrued income on investments	989,538	780,051
Other receivables, less allowance of $119,264 in 2017 and $98,460 in 2016	4,707,358	10,184,895
Supplies inventory	7,671,206	7,088,804
Total Unrestricted Current Assets	379,705,406	275,322,304
Non-Current Assets		
Restricted Assets		
Cash and cash equivalents	20,865,810	17,009,874
Investments	130,230,174	113,535,586
Long-term investments	41,015,517	32,736,862
Property taxes receivable, less allowance of $137 in 2017 and $164 in 2016	(5,266)	5,318
Accrued income on investments	192,210	144,289
Other receivables	69,694	—
Total Restricted Non-Current Assets	192,368,139	163,431,929
Other Assets		
Notes receivable	12,425,336	12,999,370
Long-term investments	61,275,000	156,994,123
Total Other Assets	73,700,336	169,993,493
Capital Assets		
Depreciable:		
Treatment and disposal plant and equipment	1,279,143,367	1,239,993,981
Collection and pumping plant	1,843,121,463	1,798,181,091
General plant and equipment	77,576,050	75,752,926
	3,199,840,880	3,113,927,998
Less: Accumulated depreciation	1,177,505,880	1,111,825,269
Net depreciable assets	2,022,335,000	2,002,102,729
Non-depreciable:		
Land	64,121,437	63,374,303
Construction in progress	691,631,657	519,044,798
Net Capital Assets	2,778,088,094	2,584,521,830
Total Non-Current Assets	3,044,156,569	2,917,947,252
Total Assets	3,423,861,975	3,193,269,556
Deferred Outflows of Resources:		
Bonds and notes payable-Deferred loss on refunding	11,320,670	11,973,700
Pension-related outflows	32,297,785	26,520,052
Total Deferred Outflows of Resources	43,618,455	38,493,752

WASTEWATER SEGMENT
STATEMENTS OF NET POSITION *(Continued)*

	June 30, 2017	2016
Liabilities		
Current Liabilities-Payable From Unrestricted Assets		
Contracts and accounts payable	$ 37,780,519	$ 37,396,996
Deposits and accrued expenses	30,405,764	29,325,752
Retainage payable	11,486,006	9,118,945
Current portion of bonds and notes payable	42,733,909	38,059,873
Total Current Liabilities-Payable From Unrestricted Assets	122,406,198	113,901,566
Current Liabilities-Payable From Restricted Assets		
Contracts and accounts payable	28,257	36,495
Retainage payable	181,642	156,537
Total Current Liabilities-Payable From Restricted Assets	209,899	193,032
Total Current Liabilities	122,616,097	114,094,598
Non-Current Liabilities		
Deposits and accrued expenses	15,137,690	14,198,048
Net pension liability	57,524,378	44,732,007
Bonds and notes payable	1,433,168,099	1,277,342,521
Total Non-Current Liabilities	1,505,830,167	1,336,272,576
Total Liabilities	1,628,446,264	1,450,367,174
Deferred Inflow of Resources:		
Pension-related inflows	3,887,511	4,868,566
Total Deferred Inflow of Resources	3,887,511	4,868,566
Net Position		
Net investment in capital assets	1,403,740,624	1,343,078,478
Restricted for:		
Debt service	55,319,023	55,364,013
Subdistrict construction and improvement	4,207,767	4,564,033
Unrestricted	371,879,241	373,521,044
Total Net Position	$ 1,835,146,655	$ 1,776,527,568

WASTEWATER SEGMENT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	For The Years Ended June 30, 2017	2016
Operating Revenues		
Sewer service charges	$ 330,883,493	$ 304,684,984
Recovery of (provision for) doubtful sewer service charge accounts	(2,534,814)	(4,062,990)
Licenses, permits, and other fees	4,036,362	3,620,240
Other	1,084,636	14,221,063
Total Operating Revenues	333,469,677	318,463,297
Operating Expenses		
Pumping and treatment	60,203,037	59,099,820
Collection system maintenance	33,476,510	33,291,567
Engineering	4,722,263	3,523,227
General and administrative	57,289,501	54,802,220
Water backup claims	5,035,020	7,631,197
Depreciation	71,128,893	73,782,843
Asset management	14,142,928	12,968,747
Total Operating Expenses	245,998,152	245,099,621
Operating Income	87,471,525	73,363,676
Non-Operating Revenues		
Property taxes levied by the District	28,555	(17,525)
Investment income	2,456,677	3,894,305
Rent and other income	106,562	102,865
Total Non-Operating Revenues	2,591,794	3,979,645
Non-Operating Expenses		
Net loss on disposal and sale of capital assets	622,841	309,877
Non-recurring projects and studies	5,886,163	9,342,338
Interest expense	31,250,777	28,943,200
Total Non-Operating Expenses	37,759,781	38,595,415
Income Before Capital Grants And Contributions	52,303,538	38,747,906
Capital Grants And Contributions		
Utility plant contributed	3,508,950	7,036,329
Grant revenue	2,806,599	765,699
Total Capital Grants And Contributions	6,315,549	7,802,028
Change In Net Position	58,619,087	46,549,934
Net Position - Beginning Of Year	1,776,527,568	1,729,977,634
Net Position - End Of Year	$ 1,835,146,655	$ 1,776,527,568

WASTEWATER SEGMENT
STATEMENTS OF CASH FLOWS

	For The Years Ended June 30, 2017	2016
Cash Flows From Operating Activities		
Received from customers	$ 338,695,092	$ 304,602,849
Paid to employees for services	(94,528,620)	(94,386,428)
Paid to suppliers for goods and services	(70,142,894)	(70,500,534)
Net Cash Provided By Operating Activities	174,023,578	139,715,887
Cash Flows Provided By (Used In) Non-Capital Financing Activities		
Taxes levied and collected	74,474	(86,140)
Cash Flows From Capital And Related Financing Activities		
Proceeds from capital grants	100,283	22,649
Proceeds from issuance of debt	185,520,681	192,622,808
Premium and (discounts) on sale of bonds	17,678,054	26,727,475
Principal paid on debt	(38,076,770)	(38,565,916)
Interest and fees paid on debt	(54,306,129)	(47,582,180)
Payments for capital assets	(252,375,421)	(216,933,464)
Proceeds from sale of capital assets	41,093	681,101
Build America bond tax credit	1,622,822	1,623,694
Net Cash Provided By (Used In) Capital And Related Financing Activities	(139,795,387)	(81,403,833)
Cash Flows From Investing Activities		
Purchase of investments	(452,346,122)	(360,630,035)
Proceeds from sale and maturity of investments	412,301,563	285,557,144
Investment income	5,846,652	5,530,955
Proceeds from rents	106,562	102,865
Net Cash Provided By (Used In) Investing Activities	(34,091,345)	(69,439,071)
Net Increase (Decrease) In Cash And Cash Equivalents	211,320	(11,213,157)
Cash And Cash Equivalents At Beginning Of Year	42,587,138	53,800,295
Cash And Cash Equivalents At End Of Year	$ 42,798,458	$ 42,587,138

Financial information as of and for the years ended June 30, 2017 and 2016 of the District's Stormwater Segment is as follows:

STORMWATER SEGMENT
STATEMENTS OF NET POSITION

	June 30,	
Assets	**2017**	**2016**
Current Assets		
Unrestricted Current Assets		
Cash and cash equivalents	$ 1,163,223	$ 1,356,757
Investments	15,888,957	8,797,808
Sewer service charges receivable, less allowance of $163,024 in 2017 and $191,346 in 2016	123,079	291,381
Unbilled sewer service charges receivable	(953)	121,144
Property taxes receivable, less allowance of $25,280 in 2017 and $39,127 in 2016	862,725	1,265,106
Accrued income on investments	26,915	25,828
Total Unrestricted Current Assets	18,063,946	11,858,024
Restricted Current Assets		
Cash and cash equivalents	2,171,935	2,065,003
Investments	29,674,144	13,393,010
Total Restricted Current Assets	31,846,079	15,458,013
Total Current Assets	49,910,025	27,316,037
Non-Current Assets		
Restricted Assets		
Cash and cash equivalents	1,979,396	3,187,578
Investments	27,043,003	20,673,435
Long-term investments	13,710,861	36,742,701
Property taxes receivable, less allowance of $31,904 in 2017 and $22,255 in 2016	1,144,461	719,568
Accrued income on investments	168,842	156,339
Total Restricted Non-Current Assets	44,046,563	61,479,621
Other Assets		
Long-term investments	3,841,013	9,488,963
Total Other Assets	3,841,013	9,488,963
Capital Assets		
Depreciable:		
Collection and pumping plant	632,588,226	621,465,929
General plant and equipment	17,217,823	16,640,099
	649,806,049	638,106,028
Less: Accumulated depreciation	198,336,533	188,602,256
Net depreciable assets	451,469,516	449,503,772
Non-depreciable:		
Land	6,573,579	6,328,167
Construction in progress	16,107,052	11,689,443
Net Capital Assets	474,150,147	467,521,382
Total Non-Current Assets	522,037,723	538,489,966
Total Assets	571,947,748	565,806,003
Deferred Outflow of Resources:		
Pension-related outflows	5,368,001	4,624,211
Total Deferred Outflow of Resources	5,368,001	4,624,211

STORMWATER SEGMENT
STATEMENTS OF NET POSITION *(Continued)*

	June 30, 2017	June 30, 2016
Liabilities		
Current Liabilities-Payable From Unrestricted Assets		
Contracts and accounts payable	$ 20,000	$ 23,762
Deposits and accrued expenses	9,240,251	9,633,010
Retainage payable	545	545
Total Current Liabilities-Payable From Unrestricted Assets	9,260,796	9,657,317
Current Liabilities-Payable From Restricted Assets		
Contracts and accounts payable	1,236,740	1,250,044
Retainage payable	565,000	282,010
Total Current Liabilities-Payable From Restricted Assets	1,801,740	1,532,054
Total Current Liabilities	11,062,536	11,189,371
Non-Current Liabilities		
Net pension liability	9,514,807	7,867,996
Total Non-Current Liabilities	9,514,807	7,867,996
Total Liabilities	20,577,343	19,057,367
Deferred Inflow of Resources:		
Pension-related inflows	717,007	843,302
Total Deferred Inflow of Resources	717,007	843,302
Net Position		
Net investment in capital assets	472,508,235	466,307,697
Restricted for:		
Subdistrict construction and improvement	75,732,269	76,618,720
Unrestricted	7,780,895	7,603,128
Total Net Position	$ 556,021,399	$ 550,529,545

STORMWATER SEGMENT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	For The Years Ended June 30,	
	2017	**2016**
Operating Revenues		
Sewer service charges	$ (10,224)	$ 1,433,561
Recovery of (provision for) doubtful sewer service charge accounts	21,071	(43,662)
Other	10,465	4,535
Total Operating Revenues	21,312	1,394,434
Operating Expenses		
Collection system maintenance	10,451,651	9,561,770
Engineering	6,567,643	7,474,392
General and administrative	1,244,910	513,152
Depreciation	10,065,498	10,200,906
Asset management	749,821	245,864
Total Operating Expenses	29,079,523	27,996,084
Operating Income (Loss)	(29,058,211)	(26,601,650)
Non-Operating Revenues		
Property taxes levied by the District	32,429,499	25,688,583
Investment income	445,947	741,561
Total Non-Operating Revenues	32,875,446	26,430,144
Non-Operating Expenses		
Net loss on disposal and sale of capital assets	50,203	14,636
Non-recurring projects and studies	1,573,375	1,658,065
Total Non-Operating Expenses	1,623,578	1,672,701
Income (Loss) Before Capital Contributions	2,193,657	(1,844,207)
Capital Contributions		
Utility plant contributed	3,298,197	4,234,756
Total Capital Contributions	3,298,197	4,234,756
Change In Net Position	5,491,854	2,390,549
Net Position - Beginning Of Year	550,529,545	548,138,996
Net Position - End Of Year	$ 556,021,399	$ 550,529,545

STORMWATER SEGMENT
STATEMENTS OF CASH FLOWS

	For The Years Ended June 30, 2017	For The Years Ended June 30, 2016
Cash Flows From Operating Activities		
Received from customers	$ 3,263,486	$ 2,484,603
Paid to suppliers for goods and services	(21,028,157)	(14,535,335)
Net Cash Provided By (Used In) Operating Activities	(17,764,671)	(12,050,732)
Cash Flows Provided By Non-Capital Financing Activities		
Taxes levied and collected	31,938,803	25,669,165
Cash Flows From Capital And Related Financing Activities		
Payments for capital assets	(14,847,039)	(10,261,405)
Proceeds from sale of capital assets	7,827	153,600
Net Cash Provided By (Used In) Capital And Related Financing Activities	(14,839,212)	(10,107,805)
Cash Flows From Investing Activities		
Purchase of investments	(72,571,974)	(53,788,919)
Proceeds from sale and maturity of investments	70,897,895	47,877,866
Investment income	1,044,375	1,002,717
Net Cash Provided By (Used In) Investing Activities	(629,704)	(4,908,336)
Net Increase (Decrease) In Cash And Cash Equivalents	(1,294,784)	(1,397,708)
Cash And Cash Equivalents At Beginning Of Year	6,609,338	8,007,046
Cash And Cash Equivalents At End Of Year	$ 5,314,554	$ 6,609,338

15. Tax Abatements

Tax abatements, as defined by Governmental Accounting Standards Board ("GASB") Statement No. 77, *Tax Abatement Disclosures* ("GASB 77"), are agreements between a government and an individual or entity in which the government promises to forgo tax revenues and the individual or entity promises to subsequently take a specific action that contributes to economic development or otherwise benefits the government or its citizens. This Statement requires disclosure of tax abatement information about (1) a reporting government's own tax abatement agreements and (2) those that are entered into by other governments and that reduce the reporting government's tax revenues.

Since the District does not and has not entered into tax abatement agreements directly with any individuals or entities, the following estimates are from tax abatements entered into by other governments, specifically the county and municipalities within the District's boundary, that have reduced the District's tax revenues.

<u>Tax Abatements Entered Into By St. Louis County and Cities Located In St. Louis County</u>

The District's property tax revenues were reduced through four programs that are utilized by cities located in St. Louis County and the County itself. Summaries of these four programs are as follows:

> Enhanced Enterprise Zone: provides real property tax abatements to new or expanding businesses in certain specified geographic areas designated by local governments and certified by the Missouri Department of Economic Development.
>
> Industrial Development Bonds: finances industrial development projects for private corporations, partnerships and individuals.
>
> Land Clearance Redevelopment Authority: assists with the redevelopment of blighted or insanitary areas for residential, recreational, commercial, industrial or public uses.
>
> Urban Redevelopment Corporations: provides real property tax abatements to encourage the redevelopment of blighted areas by an eligible city or county.

The amount of the District's tax revenues that were abated by the county and cities initiating the programs are reported in the following table. For disclosure purposes, since the data is not available from St. Louis County for the District's fiscal year 2016, the amount for fiscal year 2017 is estimated to also be the amount for fiscal year 2016.

For the Years Ended June 30, 2017 and 2016

St. Louis County or City	Enhanced Enterprise Zones	Industrial Development Bonds	Land Clearance for Redevelopment Authority	Urban Redevelopment Corporations	Total Tax Abatements
St Louis County	$ —	$ 113,907	$ —	$ 25,167	$ 139,074
Bellerive	—	21,873	—	—	21,873
Berkeley	402	—	—	—	402
Brentwood	—	—	—	12,657	12,657
Clayton	—	21,527	—	—	21,527
Edmundson	—	—	—	9,416	9,416
Eureka	—	195	—	—	195
Ferguson	—	3,637	—	509	4,146
Hazelwood	4,269	—	—	—	4,269
Jennings	—	399	—	—	399
Maryland Heights	—	—	—	283	283
Normandy	—	—	—	862	862
Overland	—	—	—	4,637	4,637
Richmond Heights	—	—	—	2,755	2,755
Rock Hill	—	—	—	3,075	3,075
Sunset Hills	—	—	—	1,140	1,140
University City	—	—	6,436	108	6,544
Wellston	—	—	—	484	484
Total Tax Abatements	$ 4,671	$ 161,538	$ 6,436	$ 61,093	$ 233,738

Tax Abatements Entered Into By St. Louis City

The City of St. Louis offers a real estate tax abatement program as a development tool designed to assist developers, businesses and individuals with renovation and new construction projects. The tax abatement freezes the tax assessment in improvements to property at the pre-development level. To be eligible for tax abatement, a significant investment must be made in the property; generally either new construction on vacant land or gut rehabilitation of an existing building. The application must be made before construction begins and the usual term for tax abatement is five to ten years.

The amount of the District's tax revenues calculated at the District's tax rate of $.119 per $100 of assessed value that were abated by St. Louis City are reported in the following table. For disclosure purposes, since the data is not available from St. Louis City for the District's fiscal year 2016, the amount for fiscal year 2017 is estimated to also be the amount for fiscal year 2016.

	For the Years Ended June 30, 2017 and 2016				
St. Louis City	**Unabated Values**	**Tax Revenue**	**Abated Values**	**Tax Revenue**	**Reduced Tax Revenue**
Residential	$ 127,828,700	$ 152,116	$ 38,634,150	$ 45,975	$ 106,141
Commercial	300,655,380	357,780	139,647,230	166,180	191,600
Total	$ 428,484,080	$ 509,896	$ 178,281,380	$ 212,155	$ 297,741

Tax Increment Financing Utilized By St. Louis County, Cities Located in St. Louis County and St. Louis City

Missouri's Real Property Tax Increment Allocation Redevelopment Act enables cities to finance certain redevelopment costs with the revenue generated from (i) payments in lieu of real estate taxes, as measured by the net increase in assessed valuation resulting from redevelopment and (ii) a portion of the increase in other local tax revenue associated with new economic activity. When a tax increment financing ("TIF") plan is adopted, real estate taxes in the redevelopment are frozen at their current level. By applying the real estate tax rate of all taxing districts having taxing power within the redevelopment area to the increased assessed valuation resulting from redevelopment, a tax "increment" is produced. The real estate tax increments are referred to as payments in lieu of taxes, or "PILOTs", and are deposited in a special allocation fund.

The estimated TIF incremental values and the District's net reduced tax revenue resulting from the TIFs adopted in St. Louis County and the cities located in the County and adopted in the City of St. Louis are as follows:

St. Louis County or City	For the Years Ended June 30, 2017 TIF Incremental Values	June 30, 2017 Reduced Tax Revenues	June 30, 2016 TIF Incremental Values	June 30, 2016 Reduced Tax Revenues
St. Louis County and Cities Located in St. Louis County	$ 433,333,020	$ 518,266	$ 401,072,910	$ 380,751
St. Louis County PILOTs Received	—	(13,569)	—	(10,396)
St. Louis City	755,714,993	291,862	751,214,993	195,346
St. Louis City PILOTs Received	—	(1,644)	—	(313)
Total	$ 1,189,048,013	$ 794,915	$ 1,152,287,903	$ 565,388

In summary, the District's total tax revenues reduced during fiscal 2017 and 2016 as a result of the programs of other governments are as follows:

St. Louis County or City	For the Years Ended June 30, 2017 Reduced Tax Revenues	June 30, 2016 Reduced Tax Revenues
St. Louis County and Cities Located in St. Louis County - Tax Abatements	$ 233,738	$ 233,738
St. Louis City - Tax Abatements	297,741	297,741
St. Louis County and Cities Located in St. Louis County - TIFs	504,697	370,355
St. Louis City - TIFs	290,218	195,033
Total Reduced Tax Revenues	$ 1,326,394	$ 1,096,867

16. Subsequent Events

In preparing these financial statements, the District has evaluated events and transactions for potential recognition or disclosure through October 17, 2017, the date the financial statements were available to be issued.

On August 2, 2017, the IRS announced a decrease in the sequestration rate for refundable credit amounts submitted on IRS Form 8038-CP for qualified bonds from 6.9% to 6.6%. This will be effective for all refund payments processed from October 1, 2017 to September 30, 2018. Since the District participates in Build America Bonds, the District will receive 93.4% of the amount requested during its fiscal year 2018. The District received 93.1% of the amount requested during fiscal year 2017.

In April 2017 the Missouri Clean Water Commission voted to approve setting the clean water SRF annual loan administrative fee to one-half percent (.5%) effective April 5, 2017 for all new direct loans and effective January 1, 2018 for all existing direct loans currently paying one percent (1.0%). This change impacts six of the District's existing SRF direct loans – Series 2010C, Series 2011A, Series 2013A, Series 2015A, Series 2016A and Series 2016B. The District's Series 2009A and Series 2010A were currently paying one-half percent. The District's Board of Trustees on September 14, 2017 approved ordinances to amend the definition of "Administrative Fee" in the previous ordinances that authorized the impacted SRF direct loans to incorporate the reduction in the annual loan administrative fee. The change in the loan administrative fee to one-half percent from one percent will reduce financing costs.

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
June 30, 2017

Schedule of Changes in Net Pension Liability and Related Ratios
In (000's)

	Calendar Year Ending December 31,		
	2016	**2015**	**2014**
Total Pension Liability			
Service cost	$ 5,107	$ 5,253	$ 5,409
Interest on total pension liability	20,609	20,199	19,901
Effect of plan changes	—	—	—
Effect of economic/demographic gains or (losses)	(883)	(4,577)	(3,668)
Effect of assumption changes or inputs	11,665	—	6,500
Benefit payments	(15,261)	(14,475)	(13,387)
Net Change in Total Pension Liability	21,237	6,400	14,755
Total Pension Liability - Beginning	296,812	290,412	275,657
Total Pension Liability - Ending (a)	318,049	296,812	290,412
Fiduciary Net Position			
Employer contributions	10,146	10,059	10,676
Member contributions	—	—	—
Investment income net of investment expenses	11,913	(1,888)	6,980
Benefit payments	(15,261)	(14,475)	(13,387)
Administrative expenses	—	—	—
Net Change in Plan Fiduciary Net Position	6,798	(6,304)	4,269
Fiduciary Net Position - Beginning	244,212	250,516	246,247
Fiduciary Net Position - Ending (b)	251,010	244,212	250,516
Net Pension Liability - Ending = (a) - (b)	$ 67,039	$ 52,600	$ 39,896
Fiduciary Net Position as a % of Total Pension Liability	78.92%	82.28%	86.26%
Covered Payroll	$ 42,055	$ 43,345	$ 44,664
Net Pension Liability as a % of Covered Payroll	159.41%	121.35%	89.32%

Notes to Schedule:

1. Changes of Assumptions. In 2016, amount reported as change of assumptions resulted from changing to RP-2014 Mortality for Employees and Healthy Annuitants and Disabled Mortality tables, while the 2014 change resulted primarily from adjustments to the discount rate and employee rate increases.
2. This schedule will ultimately present ten years of information when available.

REQUIRED SUPPLEMENTARY INFORMATION *(Continued)*
EMPLOYEES' PENSION PLAN AND POST-EMPLOYMENT BENEFIT PLAN
June 30, 2017

Employees' Pension Plan
Schedule of Employer Contributions

Fiscal Year Ending June 30,	Actuarially Determined Contribution	Annual Contribution	Contribution Deficiency (Excess)	Covered Payroll*	Contribution as a % of Covered Payroll
2015	$ 10,359,139	$ 10,359,139	$ —	$ 44,004,199	23.54%
2016	10,096,075	10,096,075	—	42,699,659	23.64%
2017	11,236,828	11,236,828	—	41,402,545	27.14%

* Estimated payroll from July 1 through June 30 based on calendar year covered payroll.

Notes to Schedule:
1. This schedule will ultimately present ten years of information when available.
2. Valuation Date: Actuarially determined contribution rates are calculated as of January 1 of the fiscal year in which the contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method:	Entry Age Normal
Amortization Method:	Level dollar layered, 20 year periods
Asset Valuation Method:	3-year smoothing period
Inflation:	2.50%
Salary Increases:	4.25%, average, including inflation
Investment Rate of Return:	7.00%, net of pension plan investment expense, including inflation
Mortality:	In the 2017 actuarial valuation, assumed life expectancies were calculated using the RP-2014 Employee and Healthy Annuitant Mortality Table and the RP-2014 Disabled Mortality Table. In the 2016 and 2015 actuarial valuations, assumed life expectancies were calculated using the RP-2000 Healthy Annuitant Mortality Table and the RP-2000 Disabled Mortality Table.

Other Post-Employment Benefit Plan
Schedule of Funding Progress
In (000's)

Actuarial Valuation Date	Actuarial Value Of Assets (1)	Actuarial Accrued Liability (2)	Unfunded Actuarial Accrued Liability (UAAL) (1)-(2)	Funded Ratio (1)/(2)	Covered Payroll (3)	UAAL As A Percentage Of Covered Payroll (1)-(2)/(3)
7/1/2015	$ —	$ 25,308	$ 25,308	0%	$ 66,958	37.8 %
7/1/2013	—	26,264	26,264	0%	60,238	43.6
7/1/2011	—	24,103	24,103	0%	52,649	45.8
7/1/2009	—	24,412	24,412	0%	50,230	48.6
7/1/2007	—	21,938	21,938	0%	43,640	50.3

The Metropolitan St. Louis Sewer District
Statistical Section

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

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

NET POSITION BY COMPONENT
LAST TEN FISCAL YEARS
(000's)

	Fiscal Year				
	2008	2009	2010	2011	2012
Net Position					
Net investment in capital assets	$ 1,704,322	$ 1,798,914	$ 1,868,974	$ 1,915,233	$ 1,928,200
Restricted	97,422	94,769	80,782	94,926	106,693
Unrestricted	324,218	293,934	257,894	186,860	175,010
Total Net Position	$ 2,125,962	$ 2,187,617	$ 2,207,650	$ 2,197,019	$ 2,209,903

	Fiscal Year				
	2013	2014	2015 [a]	2016 [a]	2017 [a]
Net Position					
Net investment in capital assets	$ 1,877,692	$ 1,845,394	$ 1,805,453	$ 1,809,386	$ 1,876,249
Restricted	111,066	142,764	142,445	136,547	135,259
Unrestricted	251,300	279,794	330,218	381,124	379,660
Total Net Position	$ 2,240,058	$ 2,267,952	$ 2,278,116	$ 2,327,057	$ 2,391,168

[a] Years 2015 to current include a change in the calculation of the net position components which is not reflected in years prior.

CHANGES IN NET POSITION
LAST TEN FISCAL YEARS

Fiscal Year	Operating Revenues	Operating Expenses	Operating Income/(Loss)	Non-operating Revenue/ (Expenses)	Income/(Loss) before Capital Contributions	Capital Contributions	Change in Net Position
2008	$ 221,925,048	$ 225,145,882	$ (3,220,834)	$ 37,259,517	$ 34,038,683	$ 45,609,805	$ 79,648,488
2009	249,725,358	212,177,779	37,547,579	(2,885,959)	34,661,620	26,993,385	61,655,005
2010	246,587,174	228,778,874	17,808,300	(17,560,670)	247,630	19,786,012	20,033,642
2011	219,444,257	244,503,099	(25,058,842)	4,329,032	(20,729,810)	10,098,552	(10,631,258)
2012	225,999,720	216,307,965	9,691,755	1,370,329	11,062,084	9,658,857	20,720,941
2013	241,946,337	230,158,434	11,787,903	832,056	12,619,959	17,534,919	30,154,878
2014	265,772,853	241,297,635	24,475,218	(3,682,863)	20,792,355	7,102,480	27,894,835
2015	290,386,589	256,521,148	33,865,441	(13,074,700)	20,790,741	12,996,754	33,787,495
2016	319,857,731	273,095,705	46,762,026	(9,858,327)	36,903,699	12,036,784	48,940,483
2017	333,490,989	275,077,675	58,413,314	(3,916,119)	54,497,195	9,613,746	64,110,941

OPERATING REVENUES BY SOURCE
LAST TEN FISCAL YEARS

Fiscal Year	Sewer Service Charges, Net	Licenses, Permits, and Other Fees	Other	Total Operating Revenues
2008	$ 216,618,417	$ 4,345,961	$ 960,670	$ 221,925,048
2009	244,699,964	3,475,283	1,550,111	249,725,358
2010	241,495,357	3,084,552	2,007,265	246,587,174
2011	214,653,310	2,976,253	1,814,694	219,444,257
2012	220,765,581	2,683,823	2,550,316	225,999,720
2013	235,980,065	2,731,497	3,234,775	241,946,337
2014	257,343,344	6,562,607	1,866,902	265,772,853
2015	282,270,193	6,656,831	1,459,565	290,386,589
2016	302,011,893	3,620,240	14,225,598	319,857,731
2017	328,359,526	4,036,362	1,095,101	333,490,989

OPERATING EXPENSES
LAST TEN FISCAL YEARS

Fiscal Year	Employment Costs	Utilities	Materials and Supplies	Contracted Services	Chemical Supplies
2008	$ 60,787,548	$ 12,837,998	$ 14,081,785	$ 64,192,143	$ 1,387,122
2009	70,475,293	12,587,699	14,855,989	48,783,447	1,589,650
2010	85,030,456	12,355,232	13,297,892	39,561,050	1,478,605
2011	84,264,583	14,170,680	11,010,962	42,854,613	1,415,826
2012	87,148,397	12,612,858	13,942,690	29,585,028	1,355,113
2013	91,939,437	14,533,557	10,355,992	31,133,523	1,455,725
2014	93,634,080	14,986,388	11,835,900	40,148,088	2,440,843
2015	96,832,265	16,500,052	17,596,766	46,020,308	3,964,165
2016	99,162,132	16,624,607	16,202,414	49,782,063	3,498,796
2017	99,357,213	16,771,366	14,453,871	51,197,293	3,569,449

Fiscal Year	Insurance	Other	Subtotal, Expenses before Depreciation	Depreciation	Total Operating Expenses
2008	$ 2,939,390	$ 13,986,037	$ 170,212,023	$ 54,933,859	$ 225,145,882
2009	2,746,119	13,769,203	164,807,400	47,370,379	212,177,779
2010	3,062,439	19,981,424	174,767,098	54,011,776	228,778,874
2011	2,578,316	21,353,854	177,648,834	66,854,265	244,503,099
2012	2,470,343	2,451,472	149,565,901	66,742,064	216,307,965
2013	2,696,416	8,013,944	160,128,594	70,029,840	230,158,434
2014	2,737,491	1,427,638	167,210,428	74,087,207	241,297,635
2015	2,791,622	(5,825,289)	177,879,889	78,641,259	256,521,148
2016	3,218,041	623,903	189,111,956	83,983,749	273,095,705
2017	3,293,267	5,240,825	193,883,284	81,194,391	275,077,675

NON-OPERATING REVENUES AND EXPENSES
LAST TEN FISCAL YEARS

	Fiscal Year				
	2008	2009	2010	2011	2012
Non-operating revenues					
Property taxes levied by the District	$ 27,512,070	$ 2,129,475	$ 1,401,100	$ 27,125,451	$ 24,604,173
Investment income	17,476,621	13,115,519	6,553,760	3,847,324	2,407,485
Rent and other income	529,983	214,674	265,004	442,968	294,591
Total non-operating revenues	45,518,674	15,459,668	8,219,864	31,415,743	27,306,249
Non-operating expenses					
Interest expense	—	9,079,269	13,189,283	7,971,088	16,365,309
Clean Water Capital Improvement refund	4,313,973	—	—	—	—
Net loss on disposal and sale of capital assets	686,459	2,161,862	2,719,163	3,485,952	3,162,723
Non-recurring projects and studies	3,258,725	7,104,496	9,872,088	10,800,843	6,402,888
Legal claims	—	—	—	4,828,828	5,000
Total non-operating expenses	8,259,157	18,345,627	25,780,534	27,086,711	25,935,920
Net non-operating revenue (expense)	$ 37,259,517	$ (2,885,959)	$ (17,560,670)	$ 4,329,032	$ 1,370,329

	Fiscal Year				
	2013	2014	2015	2016	2017
Non-operating revenues					
Property taxes levied by the District	$ 26,016,135	$ 27,450,319	$ 24,764,324	$ 25,671,058	$ 32,458,054
Investment income	1,056,966	2,966,549	3,000,591	4,635,866	2,902,624
Rent and other income	293,159	302,506	37,321	102,865	106,562
Total non-operating revenues	27,366,260	30,719,374	27,802,236	30,409,789	35,467,240
Non-operating expenses					
Interest expense	21,062,474	25,661,127	27,138,546	28,943,200	31,250,777
Net loss on disposal and sale of capital assets	795,527	5,248,443	1,420,902	324,513	673,044
Non-recurring projects and studies	4,676,203	3,492,667	12,317,488	11,000,403	7,459,538
Total non-operating expenses	26,534,204	34,402,237	40,876,936	40,268,116	39,383,359
Net non-operating revenue (expense)	$ 832,056	$ (3,682,863)	$ (13,074,700)	$ (9,858,327)	$ (3,916,119)

USER CHARGE RATES
As Of June 30, 2017

Type of Monthly Charge	Unmetered [c]	Metered: Residential [c]	Metered: Non-Residential
<u>Wastewater User Charge</u>			
Base Charge	$ 19.46	$ 19.46	$ 19.46
Compliance Charge [a]			
Tier 1	—	—	2.86
Tier 2	—	—	57.20
Tier 3	—	—	125.84
Tier 4	—	—	185.90
Tier 5	—	—	243.10
Volume Charges			
per Ccf [b]	—	3.59	3.59
per room	2.12	—	—
per water closet	7.92	—	—
per bath	6.60	—	—
per separate shower	6.60	—	—
Extra Strength Surcharges [a]			
SS over 300 ppm per ton	—	—	262.00
BOD over 300 ppm per ton	—	—	654.00
COD over 600 ppm per ton	—	—	327.00

Notes:

[a] Applicable only to non-residential customers.

[b] Ccf = Hundred cubic feet.

[c] User charges for certain low income residential users will be 50 percent of the regular user charge.

Source: Finance Department

USER CHARGE REVENUES
LAST TEN FISCAL YEARS

Fiscal Year	Wastewater Charges Billed[1]	Wastewater Charges Collected[2]	Collections as a % of Wastewater Charges Billed
2008	$ 203,646,332	$ 195,452,994	95.98%
2009	207,801,047	197,892,342	95.23%
2010	204,248,506	198,138,619	97.01%
2011	213,503,732	203,520,769	95.32%
2012	222,425,957	217,396,623	97.74%
2013	233,882,795	233,877,875	99.99%
2014	245,555,628	241,549,548	98.37%
2015	279,555,881	275,049,684	98.39%
2016	300,803,084	299,932,808	99.71%
2017	326,663,167	322,829,334	98.83%

Note: The table shows the amount of wastewater user charge revenues which were billed and collected by the District for the last ten fiscal years.

[1] Wastewater Charges Billed includes wastewater user charge revenues billed and accrued for the year.

[2] Wastewater Charges Collected includes wastewater user charge revenues collected for the current year and previous years billings.

SEWER USER CHARGES (COMPOSITE-ANNUAL)
LAST TEN FISCAL YEARS

	Fiscal Year				
	2008 [a]	2009	2010 [b]	2011 [c]	2012
Residential:					
Single Family/Unit a	$ 344.88	$ 344.88 [1]	$ 351.12 [1]	$ 333.60 [1]	$ 347.64
Multi-Family/Unit a	299.76	299.76	305.04	285.12	296.28
Commercial/Industrial:					
Service Charge/Unit [2]	457.20	457.20	486.60	507.00	525.60
Sanitary Sewer Usage Charge per Ccf	1.88	1.88	1.92	2.02	2.11
Storm Sewer Usage Charge/100 sq. feet of impervious area	—	0.12	0.14	—	—
Extra Strength Surcharges:					
Suspended Solids ("SS") over 300 parts per million/ton	218.90	218.90	218.90	222.62	231.35
Biochemical Oxygen Demand ("BOD") over 300 parts per million/ton	529.90	529.56	551.52	596.72	620.14
Chemical Oxygen Demand ("COD") over 600 parts per million/ton	264.85	264.78	275.76	298.36	310.07

	Fiscal Year				
	2013 [d]	2014	2015	2016	2017 [e]
Residential:					
Single Family/Unit a	$ 379.56	$ 421.08	$ 434.76	$ 491.52	$ 535.08
Multi-Family/Unit a	324.12	360.36	434.04	490.80	535.08
Commercial/Industrial:					
Service Charge/Unit [2]	478.56	412.56	348.12	296.80	336.69
Sanitary Sewer Usage Charge per Ccf	2.28	2.50	2.82	3.21	3.59
Storm Sewer Usage Charge/100 sq. feet of impervious area	—	—	—	—	—
Extra Strength Surcharges:					
Suspended Solids ("SS") over 300 parts per million/ton	231.35	231.35	244.03	251.88	262.00
Biochemical Oxygen Demand ("BOD") over 300 parts per million/ton	620.14	620.14	620.14	632.38	654.00
Chemical Oxygen Demand ("COD") over 600 parts per million/ton	310.07	310.07	310.07	316.19	327.00

Notes:

[1] Years 2008-2010 saw an impervious rate charge that averaged $36 per year per customer. This was discontinued in 2011.

[2] Service Charge/Unit for Commercial/Industrial is calculated by using the sum of annualized base charge and compliance charge. Starting FY 2013, MSD implemented 5-tier Compliance Charge Rate Model, so the Service Charge/Unit is based on calculated weighted average compliance charge. FY 2013, FY 2014 & FY 2015 Service Charge/Unit were adjusted to reflect the weighted average compliance charge calculations. Prior to FY 2013, there was only one tier compliance charge.

[a] Ordinance 12561, effective January 1, 2008, changed wastewater rates. Ordinance 12560, changed stormwater rates, effective March 1, 2008.
[b] Ordinance 12754, effective July 1, 2009, changed wastewater rates.
[c] Ordinance 13021, effective July 1, 2010, changed wastewater rates through FY 2012.
[d] Ordinance 13402, effective July 1, 2012, changed wastewater rates through FY 2016.
[e] Ordinance 14395, effective July 1, 2016, changed wastewater rates through FY 2020.

Source: Finance Department

NUMBER OF CUSTOMERS BY TYPE
LAST TEN FISCAL YEARS

Fiscal Year	Single Family Residential	Multi-Family Residential	Non-Residential	Total Accounts	
2008	391,181	54,862	32,336	478,379	[a]
2009	388,791	51,441	32,161	472,393	[a]
2010	387,670	50,867	31,939	470,476	[a]
2011	362,739	43,471	24,702	430,912	[b]
2012	360,354	41,648	24,568	426,570	
2013	359,243	41,117	24,441	424,801	
2014	358,928	40,951	24,297	424,176	
2015	359,317	41,131	24,389	424,837	
2016	356,926	41,585	24,001	422,512	
2017	360,534	41,697	24,253	426,484	

Source: Finance Department

[a] Due to the implementation of the impervious area charge in 2008, approximately 46,000 additional stormwater only accounts were billed each month. This charge was challenged and a court decision was entered on 7/9/10. Based on that decision the impervious charge was discontinued in FY 2011.

[b] The number of accounts were revised as stormwater accounts were underreported.

TEN LARGEST CUSTOMERS
CURRENT YEAR AND NINE YEARS AGO

Fiscal Year 2017

Customer	User Charges Amount	User Charges %
InBev Anheuser-Busch	$ 5,165,348	1.57%
City of St. Louis	2,320,129	0.71%
Washington Unversity	2,042,936	0.62%
Sigma-Aldrich	1,214,683	0.37%
St Louis University	1,102,130	0.34%
BJC HealthCare	941,584	0.29%
Hermann Oak Leather	899,699	0.27%
GKN Aerospace	844,002	0.26%
The Boeing Company	809,434	0.25%
Mallinckrodt	802,947	0.24%
Subtotal (10 largest)	16,142,892	4.92%
Balance from other customers	312,216,634	95.08%
Grand totals	$ 328,359,526	100.00%

Fiscal Year 2008

Customer	User Charges Amount	User Charges %
Anheuser-Busch	$ 7,029,150	3.24%
Mallinckrodt Inc.	1,685,617	0.78%
Washington University	994,016	0.46%
City Of St. Louis	811,893	0.37%
Chrysler Corporation	811,706	0.37%
Zoological Gardens	784,423	0.36%
Sigma-Aldrich	674,920	0.31%
Rockwood Pigments Na Inc.	624,807	0.29%
St. Louis Coca-Cola Bottling Co.	536,315	0.25%
Sensient Colors Inc.	532,339	0.25%
Subtotal (10 largest)	14,485,186	6.68%
Balance from other customers	202,133,231	93.32%
Grand totals	$ 216,618,417	100.00%

Source: Budget Division

RATIOS OF OUTSTANDING DEBT BY TYPE
LAST TEN FISCAL YEARS

Fiscal Year	Revenue Bonds: Senior	Revenue Bonds: Subordinate	Revenue Bonds: Subordinate Direct Loans	Capital Lease	Unamortized Premium, Net of Discount	Total: Amount	Total: Per Capita	Total: As a Share of Personal Income
2008	$ 230,485,000	$ 206,522,500	$ 269,299	$ —	$ 3,974,435	$ 441,251,234	$ 324	0.67
2009	258,965,000	235,932,500	215,790	4,130,000	2,640,838	501,884,128	373	0.81
2010	342,370,000	224,505,000	31,017,371	7,263,687	1,457,910	606,613,968	446	1.00
2011	340,590,000	212,655,000	25,259,899	6,095,981	862,654	585,463,534	431	0.97
2012	390,880,000	200,692,500	63,727,722	3,096,139	5,805,206	664,201,567	484	1.09
2013	594,715,000	188,600,000	93,751,658	—	56,252,401	933,319,059	660	1.45
2014	740,655,000	184,075,000	116,090,820	—	82,274,845	1,123,095,665	852	1.86
2015	736,775,000	171,455,000	148,279,465	—	78,591,961	1,135,101,426	860	1.83
2016	860,460,000	158,765,000	184,141,916	—	112,035,478	1,315,402,394	997	2.09
2017	995,175,000	145,410,000	210,851,827	—	124,465,181	1,475,902,008	1,127	2.33

Notes:

Calculation of "Per Capita" for 2011 through 2013 is based on estimated population levels.

Calculation of "As a Share of Personal Income" for 2011 through 2013 is based on estimated income levels.

In FY 2012, a decision was made to discontinue considering SRF receivable amounts as liabilities. The liability is now recorded when the funds are received.

Sources: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, and the U.S. Census Bureau

COMPUTATION OF OVERLAPPING DEBT
As Of June 30, 2017

Governmental Unit	Debt Outstanding	Amount of Debt within District Boundary	Percentage of Debt within District Boundary
City of St. Louis	$ 37,345,000	$ 37,345,000	100.0%
St. Louis County	96,850,000	96,075,200	99.2
Municipalities	122,514,491	119,459,491	97.5
City of St. Louis School District	277,879,000	277,879,000	100.0
St. Louis County School Districts	1,422,120,584	1,407,479,144	99.0
Fire Districts	103,382,568	96,395,273	93.2
	$ 2,060,091,643	2,034,633,108	98.8%
Total Direct Debt		1,475,902,008	
Total Direct and Overlapping Debt		$ 3,510,535,116	

Sources:
- City of St. Louis, Office of Comptroller
- St. Louis County, Department of Revenue
- St. Louis Public Schools, Financial/Treasurer Office
- Missouri Department of Education, School Finance
- Polled Governments
- Polled Fire Districts

Note: Although the District comprises all of the St. Louis City and most of St. Louis County, it does not entirely match the County's boundaries. The calculation of overlapping debt is based on the percentage that a political jurisdiction's territory lies within the District's territory. These percentages are weighted against the debt outstanding thus providing the amount of debt within District Boundary.

PLEDGED REVENUE COVERAGE
LAST TEN FISCAL YEARS

Fiscal Year	Operating Revenues	Non-operating Revenues	Gross Revenues	Less: Operating Expenses (excluding depreciation & GASB 68 pension exp)	Net Available Revenues
2008	$ 208,981,377	$ 13,281,919	$ 222,263,296	$ 142,725,186	$ 79,538,110
2009	209,972,662	10,283,104	220,255,766	138,971,881	81,283,885
2010	204,697,929	4,908,296	209,606,225	145,598,505	64,007,720
2011	217,011,360	3,202,219	220,213,579	160,572,145	59,641,434
2012	224,882,086	2,058,300	226,940,386	135,232,302	91,708,084
2013	240,597,715	956,664	241,554,379	146,372,419	95,181,960
2014	264,422,401	2,670,333	267,092,734	153,221,914	113,870,820
2015	288,835,877	2,555,654	291,391,531	163,311,194	128,080,337
2016	318,463,297	3,894,305	322,357,602	168,258,133	154,099,469
2017	333,469,677	2,456,677	335,926,354	168,835,676	167,090,678

Fiscal Year	Senior and Subordinate Debt Service			Coverage Ratio
	Principal	Interest	Total	
2008	$ 8,640,000	$ 17,694,791	$ 26,334,791	3.0
2009	12,110,000	17,503,892	29,613,892	2.7
2010	13,022,500	20,187,151	33,209,651	1.9
2011	14,576,800	20,140,021	34,716,821	1.7
2012	16,540,200	22,517,473	39,057,673	2.3
2013	18,749,700	31,191,190	49,940,890	1.9
2014	10,037,200	34,399,261	44,436,461	2.6
2015	20,252,200	41,596,192	61,848,392	2.1
2016	29,588,000	44,171,592	73,759,592	2.1
2017	38,026,700	51,333,869	89,360,569	1.9

Fiscal Year	Senior Debt Service			Coverage Ratio
	Principal	Interest	Total	
2008	$ 1,510,000	$ 11,067,634	$ 12,577,634	6.3
2009	1,520,000	11,677,272	13,197,272	6.2
2010	1,595,000	13,396,341	14,991,341	4.3
2011	1,780,000	15,467,269	17,247,269	3.5
2012	1,960,000	16,488,587	18,448,587	5.0
2013	3,805,000	24,451,656	28,256,656	3.4
2014	4,060,000	30,161,408	34,221,408	3.3
2015	3,880,000	34,472,415	38,352,415	3.3
2016	10,170,000	36,211,319	46,381,319	3.3
2017	15,285,000	42,897,077	58,182,077	2.9

Note: The methodology used to calculate the net available revenues and the coverage ratio was adjusted during fiscal year 2013 and all previous years were restated for comparative purposes. The 2013 change in methodology consisted of removing agency fees, previously reflected as a deduction from net available revenues, and now combining them with interest in the debt service section. Additionally, in fiscal years 2010 and 2011, the change in methodology consisted of removing the Build America Bond Tax Credit from the pledged revenue section and reapplying the credit to interest expense in the debt service section. This was made to ensure consistency with fiscal years 2012 and 2013. In fiscal 2017 the methodology was changed to exclude GASB non-cash transactions from the debt service coverage calculation. Fiscal years 2015 and 2016 have been adjusted to also exclude the GASB 68 non-cash pension expense.

DEMOGRAPHIC AND ECONOMIC STATISTICS
LAST TEN FISCAL YEARS

Fiscal Year	Populations	Personal Income (millions)	Per Capita Personal Income	Unemployment Rate: Saint Louis City	Unemployment Rate: Saint Louis County	Unemployment Rate: State	Labor Force	Total Number of Households (1)
2008	1,348,462	$ 62,135	$ 46,079	7.9	5.9	6.0	690,006	551,388
2009	1,339,011	61,947	46,263	11.5	9.7	9.5	681,801	551,388
2010	1,356,289	60,792	44,822	12.3	9.4	9.3	682,165	551,388
2011	1,357,035	60,420	44,523	11.8	8.9	9.0	692,071	546,744
2012	1,360,085	60,283	44,323	9.7	6.9	7.0	672,945	546,744
2013	1,328,610	60,399	45,460	10.5	7.3	7.1	665,086	543,851
2014	1,318,610	60,968	46,237	9.6	6.9	6.6	666,200	543,991
2015	1,319,295	61,910	46,926	7.1	5.5	5.8	703,317	543,945
2016	1,319,047	62,983	47,749	6.0	4.7	4.9	709,825	542,223
2017	1,309,985	63,322	48,338	4.7	3.7	4.9	692,644	541,394

Notes:
(1) The number of households was taken from http://www.census.gov/quickfacts/fact/table/US-MO. The 2017 figure is based on 2011-2015 data. The 2016 figure (2010-2014). The 2015 figure is based on 2013 data. The 2011-2012 figures are based on the 2010. census. Information for prior years is unavailable; therefore, the 2000 census information is used for the other years in this table.

Sources: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, and Missouri Economic Resource and Information Center (MERIC)

Footnotes- http://www.bea.gov/regional/reis/scb.cfm
http://www.missourieconomy.org/indicators/LAUS/default.aspx
http://quickfacts.census.gov/qfd/states/29000.html

PRINCIPAL EMPLOYERS (ST. LOUIS METROPOLITAN AREA)
CURRENT YEAR AND NINE YEARS AGO

	Fiscal Year 2017			Fiscal Year 2008		
Employer	Employees (1)	Percentage of Total	Rank	Employees (1)	Percentage of Total	Rank
BJC HealthCare	28,351	4%	1	23,378	4%	1
Wal-Mart Stores Inc.	22,290	3%	2	13,400	2%	4
Washington University in St. Louis	15,818	2%	3	12,390	2%	6
SSM Healthcare	14,926	2%	4	12,102	2%	7
Mercy	14,195	2%	5			
Boeing Defense, Space & Security	14,000	2%	6	16,000	2%	2
Scott Air Force Base	13,000	2%	7	13,433	2%	3
Schnuck Markets Inc.	9,956	1%	8	11,000	2%	8
AT & T	9,000	1%	9	8,990	1%	9
Archdiocese of St. Louis	8,780	1%	10			
United States Postal Service				12,700	2%	5
St. John's Mercy Health Care				8,876	1%	10
	150,316	20%		132,269	20%	

Notes:

(1) Employees are for the St. Louis area which includes several counties not served by the District.

Sources:

St. Louis Business Journal's *Book of Lists 2017 (as of May 2017)*

St. Louis Business Journal's *Book of Lists 2008*

EMPLOYMENT LEVEL
LAST TEN FISCAL YEARS

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Administrative	131	133	131	124	129	124	122	129	126	131
Office/Clerical	92	94	89	84	85	86	82	84	82	82
Plant Operation & Laboratory	239	237	249	241	244	249	252	236	226	227
Engineering & Technical	133	144	151	147	153	148	151	155	152	151
Sewer Construction & Maintenance	276	301	315	296	311	324	328	345	358	360
Total Employees	871	909	935	892	922	931	935	949	944	951

Source: Human Resources Department

AVERAGE FLOW
LAST TEN FISCAL YEARS

Fiscal Year	Average Sewage Treatment in Millions of Gallons per Day
2008	363.7
2009	394.7
2010	395.5
2011	370.6
2012	300.0
2013	326.7
2014	273.8
2015	327.5
2016	335.2
2017	328.9

Source: Operations Department

OPERATING AND CAPITAL INDICATORS
LAST TEN FISCAL YEARS

	Fiscal Year				
	2008	2009	2010	2011	2012
Miles of sewers	9,723	9,812	9,900	9,843	9,738
Number of treatment plants	7	7	7	7	7
Treatment capacity (MGD) [a]	428	423	423	528	528
Annual engineering maximum plant capacity (millions of gallons)	154,395	154,395	154,395	192,629	192,629
Amount treated annually (millions of gallons)	132,751	144,066	144,358	135,269	109,518
Unused capacity (millions of gallons)	21,644	10,329	10,037	57,360	83,111
Percentage of capacity utilized	86%	93%	93%	70%	57%

	Fiscal Year				
	2013	2014	2015	2016	2017
Miles of sewers	9,578	9,563	9,531	9,700	9,400
Number of treatment plants	7	7	7	7	7
Treatment capacity (MGD) [a]	528	533	538	538	593
Annual engineering maximum plant capacity (millions of gallons)	192,629	194,454	196,279	196,279	216,354
Amount treated annually (millions of gallons)	119,253	99,945	119,547	122,366	120,033
Unused capacity (millions of gallons)	73,376	94,509	76,732	73,913	96,321
Percentage of capacity utilized	62%	51%	61%	62%	55%

Sources: Operations Department and Engineering Department

Note:
[a] Million gallons per day.

THE METROPOLITAN ST. LOUIS SEWER DISTRICT
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