

*In the opinion of Gilmore & Bell, P.C., St. Louis, Missouri, and White Coleman & Associates, LLC, St. Louis, Missouri, Co-Bond Counsel to the District (as defined herein), under existing law and assuming continued compliance with certain requirements of the Internal Revenue Code of 1986, as amended (the "Code"), (1) the interest on the Series 2017A Bonds (as defined herein) is excludable from gross income for federal income tax purposes, and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, (2) the interest on the Series 2017A Bonds is exempt from Missouri income taxation by the State of Missouri, and (3) the Series 2017A Bonds have not been designated as "qualified tax-exempt obligations" within the meaning of Section 265(b)(3) of the Code. See the section herein captioned "TAX MATTERS" and the form of opinion of Co-Bond Counsel attached hereto as Appendix E.*



**\$316,175,000**

**THE METROPOLITAN ST. LOUIS SEWER DISTRICT**  
**Wastewater System Improvement and Refunding Revenue Bonds**  
**Series 2017A**

**Dated: Date of Delivery**

**Due: As shown on the inside cover**

The Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A (the "**Series 2017A Bonds**") will be issued by The Metropolitan St. Louis Sewer District (the "**District**") to provide funds to (a) advance refund the Refunded Bonds (as defined herein), (b) pay a portion of the costs of the Series 2017A Project (as defined herein), and (c) pay the Costs of Issuance (as defined herein) of the Series 2017A Bonds. The Series 2017A Bonds will be secured by a pledge of certain revenues of the District as further described herein under the section captioned "**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS.**"

The Series 2017A Bonds are issuable only as fully-registered bonds and when issued will be registered in the name of Cede & Co., as registered owner and nominee for The Depository Trust Company ("DTC"), New York, NY. See the section herein captioned "**THE SERIES 2017A BONDS – Book-Entry Only System.**" Principal of the Series 2017A Bonds is payable to the registered owners of the Series 2017A Bonds as set forth on the inside cover of this Official Statement. Interest on the Series 2017A Bonds is payable semiannually on May 1 and November 1 of each year, beginning on May 1, 2018. The Bank of New York Mellon Trust Company, N.A., is serving as Bond Registrar and Paying Agent (each as defined herein).

**The Series 2017A Bonds and the interest thereon are limited obligations of the District payable solely from the Pledged Revenues, as defined herein, on a parity with the District's Outstanding Prior Senior Bonds (as defined herein). The Series 2017A Bonds and the interest thereon shall not constitute a general or moral obligation of the District nor a debt, indebtedness or obligation of, or a pledge of the faith and credit of, the District or the State of Missouri (the "State" or "Missouri") or any political subdivision thereof, within the meaning of any constitutional, statutory or charter provision whatsoever. Neither the faith and credit nor the taxing power of the District, the State or any political subdivision thereof is pledged to the payment of the principal of, premium, if any, or interest on the Series 2017A Bonds or other costs incident thereto. The District has no authority to levy any taxes to pay the Series 2017A Bonds. Neither the members of the Board of Trustees of the District nor any person executing the Series 2017A Bonds shall be personally liable on the Series 2017A Bonds by reason of the issuance thereof.**

The Series 2017A Bonds are subject to optional and mandatory redemption as described herein. See the section herein captioned "**THE SERIES 2017A BONDS – Redemption Provisions.**"

**Maturities, Principal Amounts, Interest Rates, Yields, Prices and CUSIP Numbers**  
**are shown on the inside cover page**

**This cover page contains certain information for quick reference only and is not a summary of the issue. Investors must read this entire Official Statement, including the appendices hereto, to obtain information essential to the making of an informed investment decision. See "RISK FACTORS" herein for a discussion of certain risks and other considerations associated with an investment in the Series 2017A Bonds.**

The Series 2017A Bonds are offered when, as and if issued by the District and accepted by the group of Underwriters shown below, subject to prior placement, withdrawal or modification of the offer without notice and subject to the approval of their validity by Gilmore & Bell, P.C., St. Louis, Missouri, and White Coleman & Associates, LLC, St. Louis, Missouri, Co-Bond Counsel, and subject to certain other conditions. Certain legal matters will be passed upon for the District by its General Counsel and by its Disclosure Counsel, Armstrong Teasdale LLP, St. Louis, Missouri. Certain legal matters will be passed upon for the Underwriters by their co-counsel, Thompson Coburn LLP, St. Louis, Missouri, and Richard G. Hughes & Associates, LLC, St. Louis, Missouri. It is expected that the Series 2017A Bonds will be available for delivery through the facilities of DTC in New York, NY on or about December 14, 2017.

**Barclays**  
**Citigroup**  
**Loop Capital Markets**

**Siebert Cisneros Shank & Co., L.L.C.**  
**Fifth Third Securities, Inc.**  
**US Bancorp**

**\$316,175,000**  
**The Metropolitan St. Louis Sewer District**  
**Wastewater System Improvement and Refunding Revenue Bonds**  
**Series 2017A**

**MATURITY SCHEDULE**

**Series 2017A Serial Bonds**

<b><u>Maturity</u></b> <b><u>(May 1)</u></b>	<b><u>Principal</u></b> <b><u>Amount</u></b>	<b><u>Interest</u></b> <b><u>Rate</u></b>	<b><u>Yield</u></b>	<b><u>Price</u></b>	<b><u>CUSIP<sup>1</sup></u></b>
2019	\$ 3,415,000	3.00 %	1.470%	102.082%	592481 JF3
2020	3,520,000	4.00	1.560	105.678	592481 JG1
2021	3,660,000	5.00	1.610	111.108	592481 JH9
2022	5,105,000	5.00	1.710	113.826	592481 JJ5
2022	385,000	2.00	1.710	101.218	592481 JK2
2023	7,730,000	5.00	1.800	116.338	592481 JM8
2023	3,310,000	2.25	1.800	102.296	592481 JL0
2024	13,090,000	5.00	1.870	118.741	592481 JN6
2024	1,750,000	2.25	1.870	102.274	592481 JP1
2025	15,280,000	5.00	1.920	121.098	592481 JQ9
2025	75,000	3.00	1.920	107.397	592481 JR7
2026	19,180,000	5.00	1.990	123.126	592481 JT3
2026	450,000	3.00	1.990	107.759	592481 JS5
2027	23,340,000	5.00	2.080	124.765	592481 JU0
2028	24,580,000	5.00	2.160 <sup>c</sup>	123.996	592481 JV8
2029	25,595,000	5.00	2.210 <sup>c</sup>	123.517	592481 JW6
2030	9,345,000	5.00	2.300 <sup>c</sup>	122.662	592481 JX4
2031	9,810,000	5.00	2.370 <sup>c</sup>	122.002	592481 JY2
2032	10,055,000	5.00	2.430 <sup>c</sup>	121.439	592481 JZ9
2033	6,325,000	5.00	2.480 <sup>c</sup>	120.972	592481 KA2
2034	6,640,000	5.00	2.510 <sup>c</sup>	120.693	592481 KB0
2035	6,975,000	5.00	2.540 <sup>c</sup>	120.415	592481 KC8
2036	7,320,000	5.00	2.570 <sup>c</sup>	120.138	592481 KD6
2037	7,690,000	5.00	2.600 <sup>c</sup>	119.861	592481 KE4

**Series 2017A Term Bonds**

\$44,610,000 Term Bond due May 1, 2042; Interest Rate: 5.00%, Yield: 2.620%<sup>c</sup>; Price: 119.677%; CUSIP No. 592481KF1<sup>1</sup>

\$56,940,000 Term Bond due May 1, 2047; Interest Rate: 5.00%, Yield: 2.690%<sup>c</sup>; Price: 119.035%; CUSIP No. 592481KG9<sup>1</sup>

<sup>1</sup> CUSIP is a registered trademark of The American Bankers Association. CUSIP data is provided by CUSIP Global Services, managed by S&P Global Market Intelligence on behalf of the American Bankers Association, and are included solely for the convenience of the registered owners. Neither the District nor the Underwriters nor the Co-Municipal Advisors shall be responsible for the selection of CUSIP numbers nor do the District or the Underwriters or the Co-Municipal Advisors make any representation as to the correctness of such numbers on the Series 2017A Bonds or as indicated herein.

<sup>c</sup> Yield to the first optional par call date of May 1, 2027.

# **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

## **BOARD OF TRUSTEES**

James Faul, Chair  
Rev. Ronald Bobo, Vice Chair  
Ruby Bonner, Member  
Annette Mandel, Member  
Michael Yates, Member  
James I. Singer, Member

## **ADMINISTRATION**

Brian L. Hoelscher, P.E., Executive Director  
Tim R. Snoke, Secretary-Treasurer  
John Strahlman, Assistant Secretary-Treasurer  
Susan M. Myers, General Counsel  
Marion M. Gee, Director of Finance  
Richard Unverferth, P.E., Director of Engineering  
Vicki L. Taylor Edwards, Director of Human Resources  
Barbara Mohn, Director of Information Systems  
Jonathon C. Sprague, P.E., Director of Operations

## **ADVISORS AND CONSULTANTS**

### **Co-Bond Counsel**

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St. Louis, Missouri

White Coleman & Associates, LLC  
St. Louis, Missouri

### **Co-Municipal Advisors**

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Cleveland, Ohio

Independent Public Advisors, LLC  
Kansas City, Missouri

### **Financial Feasibility Consultant**

Raftelis Financial Consultants, Inc.  
Kansas City, Missouri

### **Disclosure Counsel**

Armstrong Teasdale LLP  
St. Louis, Missouri

### **Co-Underwriters' Counsel**

Thompson Coburn LLP  
St. Louis, Missouri

Richard G. Hughes & Associates, LLC  
St. Louis, Missouri

## REGARDING USE OF THIS OFFICIAL STATEMENT

THE SERIES 2017A BONDS HAVE NOT BEEN REGISTERED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, NOR HAS ANY DOCUMENT BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATIONS OF THE DISTRICT AND THE TERMS OF THE OFFERING. THE SERIES 2017A BONDS HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

IN CONNECTION WITH THE OFFERING OF THE SERIES 2017A BONDS, THE UNDERWRITERS MAY OVER ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2017A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

No dealer, broker, salesman or other person has been authorized by the District, the Underwriters or the Co-Municipal Advisors to give any information or to make any representations with respect to the Series 2017A Bonds other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement neither constitutes an offer to sell nor the solicitation of an offer to buy nor shall there be any sale of the Series 2017A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been furnished by the District and other sources which are believed to be reliable, but such information is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Co-Municipal Advisors or the Underwriters. Statements contained in this Official Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as a representation of fact. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that the information herein is correct as of any time subsequent to its date.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement.

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### CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, Section 21E of the United States Securities Exchange Act of 1934, as amended, and Section 27A of the United States Securities Act of 1933, as amended. Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "anticipate," "project," "budget" or other similar words.

Forward-looking statements include, but are not limited to, certain statements under the section in this Official Statement captioned "**RISK FACTORS**" and certain statements contained in the Report on the Financial

Feasibility of The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A in **Appendix D** hereto.

THE ACHIEVEMENT OF CERTAIN RESULTS OR OTHER EXPECTATIONS CONTAINED IN SUCH FORWARD-LOOKING STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS WHICH MAY CAUSE ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS DESCRIBED TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. NEITHER THE DISTRICT NOR ANY OTHER PARTY PLANS TO ISSUE ANY UPDATES OR REVISIONS TO THOSE FORWARD-LOOKING STATEMENTS IF OR WHEN THEIR EXPECTATIONS, OR EVENTS, CONDITIONS OR CIRCUMSTANCES UPON WHICH SUCH STATEMENTS ARE BASED OCCUR EXCEPT AS DESCRIBED IN THE SECTION HEREIN CAPTIONED "CONTINUING DISCLOSURE."

## TABLE OF CONTENTS

INTRODUCTION.....	1	Customer Accounts.....	44
Purpose of the Official Statement.....	1	Largest User Charge Customers.....	44
The District.....	1	User Charge Revenues.....	45
Purpose of and Authority for the Series 2017A		Outstanding Indebtedness.....	45
Bonds.....	2	Employee Benefits.....	46
Security and Sources of Payment for the Series		Other Post-Employment Benefits.....	48
2017A Bonds.....	2	Tax Limitation Amendment – Hancock	
Other Indebtedness.....	4	Amendment.....	48
Continuing Disclosure Information.....	5	REGULATORY REQUIREMENTS.....	48
Additional Information.....	5	General.....	48
THE SERIES 2017A BONDS.....	6	Regulatory Matters – Consent Decree.....	49
General.....	6	RISK FACTORS.....	49
Redemption Provisions.....	6	Factors Affecting the District.....	50
Effect of Notice of Redemption.....	8	Summary Financial Information.....	51
Book-Entry Only System.....	8	Certain Bankruptcy Risks.....	51
Registration, Transfer and Exchange of Series		Secondary Markets and Prices.....	51
2017A Bonds.....	11	Risk of Taxability.....	51
Persons Deemed Owners of Series 2017A Bonds.....	11	Risk of Audit.....	51
SECURITY AND SOURCES OF PAYMENT FOR THE SERIES		Limited Obligations.....	52
2017A BONDS.....	11	Loss of Premium Upon Early Redemption.....	52
General.....	11	LITIGATION.....	52
Pledged Revenues.....	12	TAX MATTERS.....	52
Pro Forma Statement of Pledged Revenues and		Opinion of Co-Bond Counsel.....	52
Debt Service Coverage.....	14	Other Tax Consequences.....	53
Flow of Funds.....	15	LEGAL MATTERS.....	54
Rate Covenant.....	19	RATINGS.....	54
Senior and Subordinate Bonds.....	20	CONTINUING DISCLOSURE.....	55
Other Indebtedness.....	20	UNDERWRITING.....	55
PLAN OF FINANCE.....	20	CERTAIN RELATIONSHIPS.....	56
Purpose of and Authority for the Series 2017A		FINANCIAL FEASIBILITY CONSULTANT.....	56
Bonds.....	20	VERIFICATION OF MATHEMATICAL CALCULATIONS....	57
Estimated Sources and Uses of Funds.....	21	MUNICIPAL ADVISORS.....	57
DEBT SERVICE SCHEDULE.....	22	INDEPENDENT AUDITORS.....	57
THE DISTRICT.....	23	MISCELLANEOUS.....	57
General.....	23		
Organization and Management.....	24	APPENDIX A - Independent Auditors' Report, Management's	
Board of Trustees.....	25	Discussion and Analysis and Basic Financial Statements of	
Administration.....	25	The Metropolitan St. Louis Sewer District for the Fiscal Year	
The System.....	27	ended June 30, 2017 and 2016	
Employees and Employee Relations.....	27	APPENDIX B - Information Regarding the District's Service	
Economic Conditions in the District.....	28	Area	
Security.....	28	APPENDIX C - Definitions and Summaries of Certain Provisions	
Insurance.....	28	of the Bond Ordinance and the Continuing Disclosure	
THE CIRP.....	29	Agreement	
General.....	29	APPENDIX D - Report on the Financial Feasibility of The	
Historical Capital Improvement Expenditures.....	29	Metropolitan St. Louis Sewer District Wastewater System	
Financing Plans for the CIRP.....	29	Improvement and Refunding Revenue Bonds, Series 2017A	
Total Capital Expenditures under CIRP.....	31	APPENDIX E - Form of Opinion of Co-Bond Counsel	
Capital Finance Plans Contemplated Under			
Consent Decree.....	31		
FINANCIAL OPERATIONS OF THE DISTRICT.....	33		
General.....	33		
Budget and Appropriation Process.....	33		
Finance Department.....	33		
Fund Structure.....	34		
Basis of Accounting.....	34		
Financial Statements.....	35		
Cash and Investments.....	35		
MANAGEMENT'S DISCUSSION AND ANALYSIS			
OVERVIEW.....	35		
2017 Financial Audit.....	35		
2016 Financial Audit.....	36		
Sewer Rates and Revenues.....	37		
Other Sources of Revenue.....	38		
Rate Commission and Rate Setting Process.....	38		
Billing and Collections.....	40		
Rate Increases.....	41		
Historical and Projected Sewer Rates and Charges.....	42		

## OFFICIAL STATEMENT

**\$316,175,000**

**The Metropolitan St. Louis Sewer District  
Wastewater System Improvement and Refunding Revenue Bonds  
Series 2017A**

### INTRODUCTION

*The following introductory information is not a summary of this Official Statement. It is only a brief description of, and is qualified by and subject in all respects to more complete and detailed information contained elsewhere in, this Official Statement, including the cover page and appendices hereto and the documents described herein. The order and placement of materials in this Official Statement, including the appendices hereto, are not to be deemed a determination of relevance, materiality or relative importance. This Official Statement, including the cover page and appendices, should be considered in its entirety. The offering of the Series 2017A Bonds to potential investors is made only by means of the entire Official Statement. All capitalized terms used in this Official Statement, including **Appendix C – “DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT,”** and not otherwise defined herein have the meanings set forth in the Bond Ordinance, as defined below.*

#### **Purpose of the Official Statement**

The purpose of this Official Statement is to set forth certain information concerning The Metropolitan St. Louis Sewer District (the “**District**”), a body corporate, municipal corporation and political subdivision organized and existing under the laws of the State of Missouri (the “**State**” or “**Missouri**”), and the District’s Charter (Plan), approved by the voters of The City of St. Louis, Missouri (the “**City**”) and St. Louis County, Missouri (the “**County**”) at a special election on February 9, 1954, as amended, and approved by the voters of the City and the County at special elections on November 7, 2000 and June 5, 2012 (collectively and as amended, the “**Charter**”) and the \$316,175,000 principal amount of Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A (the “**Series 2017A Bonds**”) to be issued by the District. See the sections herein captioned “**THE DISTRICT**” and “**THE SERIES 2017A BONDS**.”

#### **The District**

The District was created in 1954 to provide a metropolitan-wide system of wastewater treatment and sanitary sewerage facilities for the collection, treatment and disposal of sewage to serve the City and most of the more heavily populated areas of the County. 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. The District’s service area now encompasses approximately 520 square miles, including approximately all 66 square miles of the City and approximately 454 square miles (approximately 87%) of the County. As of October 4, 2017, the current population served by the District is approximately 1.3 million. A map of the District’s service area is included on the back cover hereof. See the sections herein captioned “**THE DISTRICT**,” “**THE CIRP**,” “**FINANCIAL OPERATIONS OF THE DISTRICT**,” “**MANAGEMENT’S DISCUSSION AND ANALYSIS OVERVIEW**” and “**REGULATORY REQUIREMENTS**.”

## **Purpose of and Authority for the Series 2017A Bonds**

At a special election held on June 5, 2012, voters within the District approved the issuance by the District of \$945,000,000 in sewer system revenue bonds (the “**2012 Authorization**”). At a special election held on April 5, 2016, District voters approved the issuance by the District of \$900,000,000 in sewer system revenue bonds (the “**2016 Authorization**,” together with the 2012 Authorization, collectively, the “**Current Authorizations**”). These Current Authorizations enable the District to comply with federal and State clean water requirements. The District may use the proceeds of such sewer system revenue bonds for the purpose of designing, constructing, improving, renovating, repairing, replacing and equipping new and existing District sewer and drainage facilities and systems.

The District previously issued bonds in a par amount of \$897,500,000 from the 2012 Authorization, consisting of \$225,000,000 of the Series 2012A Bonds, \$52,000,000 of the Series 2013A Bonds, \$150,000,000 of the Series 2013B Bonds, \$75,000,000 of the Series 2015A Bonds, \$150,000,000 of the Series 2015B Bonds, \$20,000,000 of the Series 2016A Bonds, \$75,500,000 of the Series 2016B Bonds, and \$150,000,000 of the Series 2016C Bonds. After the issuance of the Series 2017A Bonds, all bonds relating to the 2012 Authorization will have been issued and the remaining amount of the 2016 Authorization will be \$747,500,000. No other bonds have been issued from the 2016 Authorization.

The District will issue the Series 2017A Bonds pursuant to the Current Authorizations and the Master Bond Ordinance No. 11713 (the “**Master Bond Ordinance**”) that was adopted by the Board of Trustees of the District (the “**Board**”) on April 22, 2004, as supplemented by Ordinance No. 14835 adopted by the Board on December 5, 2017 (the “**2017A Ordinance**” together with the Master Bond Ordinance is collectively referred to herein as, the “**Bond Ordinance**”), to provide funds to (a) advance refund a portion of the District’s Series 2011B Bonds, Series 2012A Bonds, Series 2013B Bonds and the Series 2015B Bonds (each as defined herein and collectively the bonds to be refunded are defined herein as, the “**Refunded Bonds**”), (b) pay a portion of the costs of the Series 2017A Project (as defined herein), and (c) pay the Costs of Issuance (as defined in **Appendix C** to this Official Statement) of the Series 2017A Bonds. For more information, see the sections herein captioned “**THE CIRP**” and “**PLAN OF FINANCE - Purpose of and Authority for the Series 2017A Bonds**” (which also includes the outstanding principal amounts of the Refunded Bonds as of November 1, 2017).

A description of the Series 2017A Bonds is contained in this Official Statement under the caption “**THE SERIES 2017A BONDS**.” All references to the Series 2017A Bonds are qualified in their entirety by the definitive form thereof and the provisions with respect thereto in the Bond Ordinance. See **Appendix C – “DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT”** for the definitions of all capitalized words used herein and not otherwise defined herein.

## **Security and Sources of Payment for the Series 2017A Bonds**

**General.** The Series 2017A Bonds are sewer system revenue bonds secured by and payable from certain revenues of the District received from operation of its sanitary sewer system (as further defined herein, the “**System**”) on a parity with the prior outstanding series of bonds (the “**Prior Senior Bonds**”) issued by the District as shown in the following table.



<u>Name of Issue</u>	<u>Series Designation</u>	<u>Issue Date</u>	<u>Original Principal Amount</u>	<u>Outstanding Principal Amount as of Nov. 1, 2017</u>
Taxable Wastewater System Revenue Bonds (Build America Bonds – Direct Pay), Series 2010B	(“Series 2010B Bonds”)	01/28/2010	\$85,000,000	\$85,000,000
Wastewater System Revenue Bonds, Series 2011B	(“Series 2011B Bonds”)*	12/22/2011	52,250,000	43,410,000
Wastewater System Revenue Bonds, Series 2012A	(“Series 2012A Bonds”)*	08/23/2012	225,000,000	214,700,000
Wastewater System Refunding Revenue Bonds, Series 2012B	(“Series 2012B Bonds”)	11/14/2012	141,730,000	134,710,000
Wastewater System Revenue Bonds, Series 2013B	(“Series 2013B Bonds”)*	12/18/2013	150,000,000	146,000,000
Wastewater System Improvement and Refunding Revenue Bonds, Series 2015B	(“Series 2015B Bonds”)*	12/15/2015	223,855,000	221,355,000
Wastewater System Revenue Bonds, Series 2016C	(“Series 2016C Bonds”)	12/20/2016	150,000,000	150,000,000

\* Denotes Prior Senior Bonds, a portion of each series of which is being advance refunded by the Series 2017A Bonds. Outstanding Principal amounts are as of November 1, 2017 and therefore include the principal amounts to be advance refunded.

Collectively, the Series 2017A Bonds, any Outstanding Prior Senior Bonds and any additional Bonds then Outstanding issued with a right to payment and secured by a lien on a parity therewith are referred to herein as the “**Senior Bonds.**” The Senior Bonds are also secured by amounts in the Renewal and Extension Fund (as defined herein). See the section herein captioned “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS.**”

The Series 2017A Bonds and the interest thereon are limited obligations of the District, payable solely from the Pledged Revenues, as defined herein, on a parity with the other Senior Bonds. The Series 2017A Bonds and the interest thereon shall not constitute a general or moral obligation of the District nor a debt, indebtedness, or obligation of, or a pledge of the faith and credit of, the District, the State or any political subdivision thereof, within the meaning of any constitutional, statutory or charter provision whatsoever. Neither the faith and credit nor the taxing power of the District, the State, or any political subdivision thereof is pledged to the payment of the Principal of, premium, if any, or interest on the

Series 2017A Bonds or other costs incident thereto. The District has no authority to levy any taxes to pay the Series 2017A Bonds. Neither the members of the Board nor any person executing the Series 2017A Bonds shall be liable personally on the Series 2017A Bonds by reason of the issuance thereof.

***Pledged Revenues.*** The Series 2017A Bonds are sewer system revenue bonds secured by a pledge of certain revenues of the System, referred to herein as “**Pledged Revenues.**” See the sections herein captioned “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS – Pledged Revenues**” and “**– Flow of Funds**” and “**FINANCIAL OPERATIONS OF THE DISTRICT – Selected Financial Data of the District**” for further discussion of the specific District revenues constituting Pledged Revenues under the Bond Ordinance.

***Renewal and Extension Fund.*** The Bond Ordinance establishes a Renewal and Extension Fund into which the District may deposit a portion of the Pledged Revenues. See “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS – Flow of Funds - Deposits to and Uses of Moneys in the Renewal and Extension Fund.**”

***Series 2017A Bonds Not Secured by the Debt Service Reserve Account.*** The Bond Ordinance also establishes a Debt Service Reserve Account for the Senior Bonds, excluding any Senior SRF Bonds (as defined in **Appendix C** to this Official Statement) and Senior Uncovered Bonds. “**Senior Uncovered Bonds**” means all series of Senior Bonds, other than Senior SRF Bonds, with respect to which the District has specified pursuant to a Series Ordinance (as defined in **Appendix C** to this Official Statement) authorizing such series of Senior Bonds that such series of Senior Bonds will not be secured by the Debt Service Reserve Account. The Series 2017A Bonds are Senior Uncovered Bonds and therefore are **not** secured by the Debt Service Reserve Account. See “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS – Flow of Funds – Deposits to and Uses of Moneys in the Debt Service Reserve Account.**”

***Additional Bonds.*** The Bond Ordinance authorizes the District to issue additional Bonds thereunder which may be either “**Senior Bonds**” or “**Subordinate Bonds,**” subject to certain requirements of the Bond Ordinance. The Bond Ordinance defines “**Senior Bonds**” as Bonds that have a right to payment and are secured by a lien on a parity with the Outstanding Senior Bonds and any additional Bonds issued on a parity (except with respect to any Credit Facility which may be available only to one or more series of Senior Bonds) with respect to the Pledged Revenues. The Master Bond Ordinance defines “**Subordinate Bonds**” as Bonds, including Subordinate SRF Bonds (as defined in **Appendix C** to this Official Statement), issued with a right to payment from the Pledged Revenues and secured by a lien on the Pledged Revenues expressly junior and subordinate to the Senior Bonds. The Series 2017A Bonds and any other Senior Bonds or Subordinate Bonds issued by the District previously or in the future under the Master Bond Ordinance are referred to herein collectively as the “**Bonds.**” See “**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**” in **Appendix C** hereto for a discussion of the requirements that must be satisfied under the Master Bond Ordinance prior to the issuance of additional Bonds thereunder.

## **Other Indebtedness**

There are twenty series of Outstanding Bonds previously issued by the District (not including the Series 2017A Bonds), which are payable from Pledged Revenues of the System for the purpose of financing or refinancing the cost of designing, constructing, improving, renovating, repairing, replacing and equipping new and existing District wastewater facilities. Prior to the issuance of the Series 2017A Bonds and as of November 1, 2017, the aggregate principal amount of Senior Bonds Outstanding is \$995,175,000. In addition to the seven series of outstanding Senior Bonds (not including the Series

2017A Bonds), the District has five additional series of outstanding Subordinate Bonds payable from Pledged Revenues on a subordinate basis to the Senior Bonds outstanding in the aggregate principal amount of \$142,070,000 that were purchased by the State Environmental Improvement and Energy Resources Authority of the State of Missouri (the “**Authority**”) through the Missouri State Revolving Fund Program (the “**SRF Program**”) of the Authority and the Missouri Department of Natural Resources (“**DNR**”). The District also has eight additional series of Outstanding Bonds payable from Pledged Revenues on a subordinate basis to the Senior Bonds, which are outstanding in the aggregate principal amount of \$213,843,292 under the State’s Direct Loan Program, which were issued as Subordinate Bonds under the Master Bond Ordinance and the applicable Series Ordinances. For additional information on the thirteen series of Subordinate Bonds (collectively, the “**Subordinate SRF Bonds**”), see the section herein captioned “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS – Other Indebtedness**”.

### **Continuing Disclosure Information**

At the time of issuance of the Series 2017A Bonds, the District will enter into a Disclosure Dissemination Agent Agreement dated as of December 1, 2017 (the “**Continuing Disclosure Agreement**”) with Digital Assurance Certification, L.L.C. (“**DAC**”), under which the District will designate DAC as Disclosure Dissemination Agent (as defined in **Appendix C** to this Official Statement). Pursuant to the Continuing Disclosure Agreement, the District will covenant to provide certain financial and operating information with respect to the District on an on-going basis and notice of certain events in accordance with Rule 15c2-12 promulgated by the United States Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time (“**Rule 15c2-12**”). These covenants have been made in order to assist the Underwriters (as defined herein) in complying with Rule 15c2-12. See the section herein captioned “**CONTINUING DISCLOSURE**” and “**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**” in **Appendix C** hereto.

### **Additional Information**

**Appendix A** to this Official Statement contains the Independent Auditors’ Report, Management’s Discussion and Analysis and Basic Financial Statements of the District for the Fiscal Year ended June 30, 2017 and 2016. **Appendix B** to this Official Statement contains certain information regarding the service area of the District. **Appendix C** to this Official Statement includes definitions of certain capitalized terms used in this Official Statement and summaries of certain provisions of the Bond Ordinance and the Continuing Disclosure Agreement. **Appendix D** to this Official Statement contains the Report on the Financial Feasibility of The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A prepared on behalf of the District with respect to the Series 2017A Bonds (the “**Feasibility Report**”). **Appendix E** to this Official Statement contains the proposed form of the opinion that is anticipated to be rendered by Co-Bond Counsel at the time of delivery of the Series 2017A Bonds.

Brief descriptions of the Series 2017A Bonds, the Bond Ordinance and the District are included in this Official Statement. Such descriptions, information and summaries provided herein do not purport to be comprehensive or definitive. All references herein to any documents are qualified by the terms of such documents in their entirety. Until the issuance and delivery of the Series 2017A Bonds, copies of the documents described herein may be obtained from the District. After delivery of the Series 2017A Bonds, copies of such documents will be available for inspection at the corporate trust office of The Bank of New York Mellon Trust Company, N.A. in St. Louis, Missouri, as the Paying Agent under the Bond Ordinance (the “**Paying Agent**”).

## THE SERIES 2017A BONDS

### General

The Master Bond Ordinance authorizes the issuance of Bonds thereunder from time to time in one or more series substantially in the form set forth in the related Series Ordinance. The 2017A Ordinance further authorizes the execution, issuance and delivery of a series of Bonds thereunder and under the Master Bond Ordinance to be designated as “The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A” in the aggregate principal amount of \$316,175,000 which series of Bonds shall be executed, issued and delivered under, and secured by, the Master Bond Ordinance and the 2017A Ordinance. Additional Senior Bonds and Subordinate Bonds may also be issued from time to time as provided in, and subject to the limitations set forth in, the Master Bond Ordinance and the 2017A Ordinance. See “**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**” in **Appendix C** hereto.

The Series 2017A Bonds shall be issued in fully registered form in the denomination of \$5,000 each or integral multiples thereof and shall be dated the date of delivery thereof. Each Series 2017A Bond shall be numbered in a convenient manner, established by The Bank of New York Mellon Trust Company, N.A. in St. Louis, Missouri (the “**Bond Registrar**”), and shown on the Bond Register. The Series 2017A Bonds shall bear interest at the rates per annum set forth on the inside cover hereof, computed on the basis of a 360-day year consisting of twelve 30-day months, payable on May 1, 2018, and semiannually thereafter on May 1 and November 1 of each year and shall mature in the principal amounts as set forth on the inside cover hereof, unless earlier called for redemption.

So long as any of the Series 2017A Bonds are in book-entry form, the Principal, redemption premium, if any, and interest on such Series 2017A Bonds are payable by check or draft mailed, or wire transfer, to Cede & Co. as Registered Owner thereof and will be redistributed by DTC and the Participants as described below under “**Book-Entry Only System.**”

### Redemption Provisions

***Optional Redemption of Series 2017A Bonds.*** At the District’s option, the Series 2017A Bonds or portions thereof maturing on May 1, 2028 and thereafter may be called for redemption and payment prior to their stated maturity on May 1, 2027, and thereafter, in whole or in part on any date in such order of maturity as shall be determined by the District at the redemption price of 100% of the principal amount thereof plus accrued interest thereon to the redemption date.

***Mandatory Sinking Fund Redemption of the Series 2017A Bonds.*** The Series 2017A Bonds maturing in the years 2042 and 2047 are Term Bonds and are subject to mandatory redemption prior to maturity on May 1 in each of the years set forth on the following page (each a “mandatory redemption date”), at 100% of the principal amount thereof plus accrued interest to the redemption date, without premium:

**Series 2017A Bonds Maturing May 1, 2042**

<u>Year</u>	<u>Principal Amount</u>
2038	\$8,075,000
2039	8,475,000
2040	8,900,000
2041	9,345,000
2042 <sup>+</sup>	9,815,000

<sup>+</sup>Final maturity

**Series 2017A Bonds Maturing May 1, 2047**

<u>Year</u>	<u>Principal Amount</u>
2043	\$10,305,000
2044	10,820,000
2045	11,360,000
2046	11,930,000
2047 <sup>+</sup>	12,525,000

<sup>+</sup>Final maturity

The District shall redeem such an aggregate Principal amount of the Series 2017A Bonds that are Term Bonds at a redemption price equal to the Principal amount thereof plus the interest due thereon to the mandatory redemption date.

***Selection of Bonds to be Redeemed; Redemption Among Series.*** If less than all of the Bonds of like maturity of any series shall be called for redemption, the particular Bonds, or portions of Bonds, to be redeemed shall be selected by the Paying Agent in such equitable manner as the Paying Agent may determine. The portion of any Bond of a denomination of more than \$5,000 to be redeemed shall be in the Principal amount of \$5,000 or an integral multiple thereof, and, in selecting portions of such Bonds for redemption, the District shall treat each such Bond as representing that number of Bonds which is obtained by dividing the Principal of such Bond to be redeemed in part by \$5,000. Subject to the redemption provisions of any Series Ordinance, the District in its discretion may redeem the Bonds of any series, or a portion of the Bonds of any such series, before it redeems the Bonds of any other series. Within any particular series, any redemption of Bonds shall be effected in the manner provided in the Master Bond Ordinance and in any Series Ordinance.

***Notice of Redemption.*** Unless waived by any registered owner of Bonds to be redeemed and except as may be otherwise provided in a Series Ordinance, official notice of any such redemption shall be given by the Bond Registrar on behalf of the District by mailing a copy of an official redemption notice by first class mail, at least 30 days and not more than 60 days prior to the date fixed for redemption to the registered owner of the Bond or Bonds to be redeemed at the address shown on the Bond Register or at such other address as is furnished in writing by such registered owner to the Bond Registrar.

All official notices of redemption shall be dated, shall contain the complete official name of the Bond issue, and shall state: (1) the redemption date; (2) the redemption price; (3) the interest rate and maturity date of the Bonds being redeemed; (4) if less than all the Outstanding Bonds are to be redeemed, the Bond numbers, and, when part of the Bonds evidenced by one Bond certificate are being redeemed,

the respective Principal amounts of such Bonds to be redeemed; (5) that on the redemption date the redemption price will become due and payable upon each such Bond or portion thereof called for redemption and that interest thereon shall cease to accrue from and after such date; and (6) the place where such Bonds are to be surrendered for payment of the redemption price (which place of payment shall be the principal payment office of the Paying Agent or at such other office designated by the Paying Agent for such purpose) and the name, address, and telephone number of a person or persons at the Paying Agent who may be contacted with respect to the redemption.

Any notice of redemption of any Bonds may specify that the redemption is contingent upon the deposit of moneys with the Paying Agent in an amount sufficient to pay the redemption price (which price shall include the redemption premium, if any) of all the Bonds or portions of Bonds which are to be redeemed on that date. Prior to any redemption date, the District shall deposit with the Paying Agent an amount of money sufficient to pay the redemption price of all the Bonds or portions of Bonds which are to be redeemed on that date.

For so long as DTC is effecting book-entry transfers of the Bonds, the Bond Registrar shall provide the notices specified in the Bond Ordinance to DTC. It is expected that DTC shall, in turn, notify its participants and that the participants, in turn, will notify or cause to be notified the Beneficial Owners. Any failure on the part of DTC or a participant, or failure on the part of a nominee of a Beneficial Owner of a Bond (having been mailed notice from the Bond Registrar, a participant or otherwise) to notify the Beneficial Owner of the Bond so affected, shall not affect the validity of the redemption of such Bond.

Any defect in any notice of redemption shall not affect the validity of proceedings for redemption of the Bonds.

### **Effect of Notice of Redemption**

Official notice of redemption having been given in the manner and under the conditions provided in the Bond Ordinance and moneys for payment of the redemption price being held by the Paying Agent as provided in the Bond Ordinance, the Bonds or portions of Bonds called for redemption shall, on the redemption date designated in such notice, become and be due and payable at the redemption price provided for redemption of such Bonds or portions of Bonds on such date, and from and after such date interest on the Bonds or portions of Bonds called for redemption shall cease to accrue, such Bonds or portions of Bonds shall cease to be entitled to any lien, benefit, or security under the Bond Ordinance, and the owners of such Bonds or portions of Bonds shall have no rights in respect thereof except to receive payment of the redemption price thereof. Upon surrender for partial redemption of any Bond, there shall be prepared for and delivered to the registered owner a new Bond or Bonds of the same series, maturity, and interest rate in the amount of the unpaid Principal.

### **Book-Entry Only System**

The Series 2017A Bonds are available in book-entry only form. Purchasers of the Series 2017A Bonds will not receive certificates representing their interests in the Series 2017A Bonds. Ownership interests in the Series 2017A Bonds will be available to purchasers only through a book-entry system (the “**Book-Entry System**”) maintained by DTC, New York, NY. The information provided immediately below concerning DTC and the Book-Entry Only System, as it currently exists, has been obtained from DTC and is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the District. The District makes no assurances that DTC, Direct Participants, Indirect Participants or other nominees of the Beneficial Owners will act in accordance with the procedures described herein or in a timely manner.

**General.** DTC, New York, NY, will act as securities depository for the Series 2017A Bonds. The Series 2017A Bonds will be issued as fully-registered bonds registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 2017A Bond certificate will be issued for each maturity of the Series 2017A Bonds, each in the aggregate principal amount of such maturity, and will be deposited with the Paying Agent as DTC's "FAST Agent."

**DTC and Participants.** DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("**Direct Participants**") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("**DTCC**"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("**Indirect Participants**"). DTC has an S&P Global Ratings' rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at <http://www.dtcc.com>.

**Purchases of Ownership Interests.** Purchases of Series 2017A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2017A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2017A Bond ("**Beneficial Owner**") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2017A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2017A Bonds, except in the event that use of the Book-Entry System for the Series 2017A Bonds is discontinued.

**Transfers.** To facilitate subsequent transfers, all Series 2017A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2017A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2017A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2017A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

**Notices.** Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Series 2017A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2017A Bonds, such as redemptions, tenders, defaults and proposed amendments to the Series 2017A Bond documents. For example, Beneficial Owners of the Series 2017A Bonds may wish to ascertain that the nominee holding the Series 2017A Bonds for their benefit has agreed to obtain and transmit notice to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2017A Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

**Voting.** Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2017A Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the District as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2017A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

**Payments of Principal, Redemption Price and Interest.** Redemption proceeds, distributions, and dividend payments on the Series 2017A Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the District or the Paying Agent on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC nor the Paying Agent, or the District, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the District or the Paying Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

**Discontinuation of Book-Entry Only System.** DTC may discontinue providing its services as depository with respect to the Series 2017A Bonds at any time by giving reasonable notice to the Paying Agent or the District. Under such circumstances, in the event that a successor depository is not obtained, Series 2017A Bond certificates are required to be printed and delivered.

The Direct Participant holding a majority position in the Series 2017A Bonds may decide to discontinue use of the system of book-entry transfer through DTC (or a successor securities depository). In that event, Series 2017A Bond certificates will be printed and delivered to DTC.

*The information above concerning DTC and DTC's book-entry system has been obtained from DTC and is not guaranteed as to accuracy or completeness by and is not to be construed as a representation by the District. The District does not make any assurance that DTC, Direct Participants, Indirect Participants or other nominees of the Beneficial Owners will act in accordance with the procedures described above or in a timely manner.*



## **Registration, Transfer and Exchange of Series 2017A Bonds**

The Paying Agent has been appointed the Bond Registrar and as such shall maintain the Bond Register for the registration and transfer of Series 2017A Bonds as provided in the Bond Ordinance.

Any Series 2017A Bond may be transferred only upon the books kept for the registration and transfer of Series 2017A Bonds upon surrender thereof to the Paying Agent duly endorsed for transfer or accompanied by a written instrument of transfer duly executed by the registered owner or his attorney or legal representative in such form as shall be satisfactory to the Paying Agent. Upon any such transfer, the District shall execute and the Paying Agent shall authenticate and deliver in exchange for such Series 2017A Bond a new fully registered Series 2017A Bond or Series 2017A Bonds, registered in the name of the transferee, of any denomination or denominations authorized by the Bond Ordinance.

Any Series 2017A Bond, upon surrender thereof at the principal corporate trust office of the Paying Agent together with a written instrument of transfer duly executed by the registered owner or his attorney or legal representative in such form as shall be satisfactory to the Paying Agent, may at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of Series 2017A Bonds of the same series and maturity and bearing interest at the same rate.

In all cases in which Series 2017A Bonds shall be exchanged or transferred, the District shall execute and the Paying Agent shall authenticate and deliver, at the earliest practicable time, Series 2017A Bonds in accordance with the provisions of the Bond Ordinance. All Series 2017A Bonds surrendered in any such exchange or transfer shall forthwith be cancelled by the Paying Agent. The District or the Paying Agent may charge the Bondholder requesting the same for every such exchange or transfer of Series 2017A Bonds sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or transfer, and such charge shall be paid before any such new Series 2017A Bond shall be delivered.

## **Persons Deemed Owners of Series 2017A Bonds**

The person in whose name any Series 2017A Bond shall be registered as shown on the Bond Register required to be maintained by the Paying Agent shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of and redemption premium, if any, and interest on any such Series 2017A Bond shall be made only to or upon the order of the Registered Owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Series 2017A Bond, including the interest thereon, to the extent of the sum or sums so paid.

## **SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS**

### **General**

The Series 2017A Bonds are sewer system revenue bonds secured by and payable from Pledged Revenues on a parity with the District's Outstanding Senior Bonds and any other Senior Bonds issued under the terms of the Master Bond Ordinance. The Senior Bonds are also secured by amounts on deposit in the Renewal and Extension Fund and, except with respect to Senior Uncovered Bonds, the Debt Service Reserve Account. The Series 2017A Bonds are Senior Uncovered Bonds and therefore are not secured by the Debt Service Reserve Account.

The Series 2017A Bonds and the interest thereon are limited obligations of the District payable solely from the Pledged Revenues on a parity with the other Senior Bonds. The Series 2017A Bonds and

the interest thereon shall not constitute a general or moral obligation of the District nor a debt, indebtedness or obligation of, or a pledge of the faith and credit of, the District or the State or any political subdivision thereof, within the meaning of any constitutional, statutory or charter provision whatsoever. Neither the faith and credit nor the taxing power of the District, the State or any political subdivision thereof is pledged to the payment of the Principal of, premium, if any, or interest on the Series 2017A Bonds or other costs incident thereto. The District has no authority to levy any taxes to pay the Series 2017A Bonds. Neither the members of the Board nor any person executing the Series 2017A Bonds shall be liable personally on the Series 2017A Bonds by reason of the issuance thereof.

## **Pledged Revenues**

Pursuant to the Master Bond Ordinance, the District has pledged all Pledged Revenues to the payment of the Principal of, premium, if any, and interest on all Bonds issued thereunder. Such pledge is for the equal and proportionate benefit and security of the District's Outstanding Senior Bonds and any other Senior Bonds issued under the terms of the Master Bond Ordinance regardless of the time or times of their issuance or maturity. In the Master Bond Ordinance, the District covenants that it will not issue obligations of any kind or nature payable from, or with a lien on, the Pledged Revenues or any part thereof having priority over or, except as permitted in the Master Bond Ordinance for the issuance of Senior Bonds, on a parity with the Series 2017A Bonds. Notwithstanding the foregoing, the Master Bond Ordinance permits the issuance of Subordinate Bonds secured by the Pledged Revenues on a subordinate basis to the Senior Bonds.

**"Pledged Revenues"** means (a) Net Operating Revenues (as defined herein) of the System (as defined in the directly below paragraph), (b) Investment Earnings (as defined in the Bond Ordinance as all interest received on and profits derived from investments of moneys in all funds and accounts of the District other than investments derived from or with respect to (i) stormwater revenues, as described below, (ii) all funds and accounts established in connection with SRF Bonds and (iii) obligations issued by the District on behalf of any of its subdistricts), (c) Hedge Receipts and (d) all moneys paid or required to be paid into, and all moneys and securities on deposit from time to time in, the funds and accounts specified in the Bond Ordinance, but excluding any amounts required in the Bond Ordinance to be set aside pending, or used for, rebate to the United States of America government pursuant to Section 148(f) of the Internal Revenue Code of 1986, as amended (the **"Code"**), including, but not limited to, amounts in the Rebate Fund created in the Bond Ordinance.

The Bond Ordinance defines the **"System"** as the sanitary sewer system of the District, as it now exists and as it may be added to, extended, improved and equipped, either from the proceeds of the Bonds or from any other sources at any time, including without limitation, (a) all sanitary sewers, all combined sewers, all pumping stations, all wastewater treatment plants, and all equipment used in connection therewith, all facilities for the collection, treatment and disposal of sewage and wastewater, including industrial wastes, and (b) all other facilities or property of any nature or description, real or personal, tangible or intangible, owned or used by the District in the collection, treatment and disposal of sewage.

The Bond Ordinance defines **"Net Operating Revenues"** as all Operating Revenues, after provision for payment of all Expenses of Operation and Maintenance. The Bond Ordinance defines **"Operating Revenues"** as all income and revenue of any nature derived from the operation of the System, including periodic wastewater billings, service charges, other charges for wastewater service and the availability thereof (other than any special assessment proceeds), connection or tap fees (whether accounted for as revenues or as contributed capital), net proceeds from business interruption insurance, the principal of gifts, bequests, contributions, grants and donations available to pay debt service of Bonds, and any amounts deposited in escrow in connection with the acquisition, construction, remodeling,

renovation and equipping of facilities to be applied during the period of determination to pay interest on Bonds.

The Bond Ordinance expressly excludes the following from the definition of Operating Revenues: (1) any profits or losses on the early extinguishment of debt or on the sale or other disposition, not in the ordinary course of business, of investments or fixed or capital assets, and local, state or federal grants or other moneys received for the payment of Expenses of Operation and Maintenance (See **Appendix C** for definition of “**Expenses of Operation and Maintenance**”), (2) local, state, or federal grants, loans (including Government Loans), capital improvement contract payments, or other moneys received for capital improvements to the System, (3) Investment Earnings, (4) any stormwater charges (referred to herein as the “**Stormwater Service Charges**”) and (5) any property tax revenues. Although revenues from the Stormwater Service Charge are not included in Operating Revenues and thus are not available for payment of debt service on any Bonds issued under the Bond Ordinance, including the Series 2017A Bonds, such revenues are accounted for and included in the amount of Operating Revenues identified in the Independent Auditor’s Report and Financial Statements included as **Appendix A** to this Official Statement.

The schedule of Pledged Revenues shown on the following page was prepared to show the amount of Pledged Revenues available historically to pay debt service on the Bonds.

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**WASTEWATER SEGMENT**  
**SCHEDULE OF PLEDGED REVENUES**  
**For the Fiscal Years Ended June 30, 2013 Through 2017**  
(In Thousands)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<b>Operating Revenues</b>					
Sewer service charges <sup>1</sup>	\$237,296	\$248,763	\$282,957	\$304,685	\$330,883
Recovery (provision) of doubtful sewer services charge account	(2,636)	7,230	(2,230)	(4,062)	(2,534)
Licenses, permits and other fees	2,732	6,563	6,657	3,620	4,036
Other	<u>3,206</u>	<u>1,867</u>	<u>1,452</u>	<u>14,221</u>	<u>1,085</u>
<b>Total Operating Revenues</b>	<b>\$240,598</b>	<b>\$264,422</b>	<b>\$288,836</b>	<b>\$318,464</b>	<b>\$333,470</b>
<b>Nonoperating Revenues<sup>2</sup></b>					
Investment income	\$957	\$2,670	\$2,556	\$3,894	\$2,456
<b>Total Operating and Nonoperating Revenues</b>	<b>\$241,554</b>	<b>\$267,093</b>	<b>\$291,392</b>	<b>\$322,358</b>	<b>\$335,926</b>
<b>Operating Expenses</b>					
Pumping and treatment	\$54,526	\$54,126	\$60,766	\$59,100	\$60,203
Collection system maintenance	31,095	32,722	32,141	33,292	33,477
Engineering	5,391	5,569	4,589	3,523	4,722
General and administrative	41,485	45,661	48,580	51,744	51,256
Water backup claims	3,503	2,713	3,862	7,631	5,035
Asset Management	<u>10,372</u>	<u>12,432</u>	<u>13,374</u>	<u>12,969</u>	<u>14,143</u>
<b>Total Operating Expenses</b>	<b>\$146,372</b>	<b>\$153,222</b>	<b>\$163,312</b>	<b>\$168,259</b>	<b>\$168,835</b>
<b>Total Expenses</b>	<b>\$146,372</b>	<b>\$153,222</b>	<b>\$163,312</b>	<b>\$168,259</b>	<b>\$168,835</b>
<b>Pledged Revenues</b>	<b><u>\$95,182</u></b>	<b><u>\$113,871</u></b>	<b><u>\$128,080</u></b>	<b><u>\$154,099</u></b>	<b><u>\$167,091</u></b>
<b>Senior Bond Debt Service</b>	<b>\$28,257</b>	<b>\$34,221</b>	<b>\$38,352</b>	<b>\$46,381</b>	<b>\$58,182</b>
<b>Subordinate Bond Debt Service</b>	<b><u>21,684</u></b>	<b><u>10,215</u></b>	<b><u>23,496</u></b>	<b><u>27,379</u></b>	<b><u>31,178</u></b>
<b>Total Debt Service<sup>2</sup></b>	<b>\$49,941</b>	<b>\$44,436</b>	<b>\$61,848</b>	<b>\$73,760</b>	<b>\$89,360</b>
<b>Senior Bond Debt Coverage Ratio</b>	<b>3.4x</b>	<b>3.3x</b>	<b>3.3x</b>	<b>3.3x</b>	<b>2.9x</b>
<b>Total Debt Service Coverage Ratio</b>	<b>1.9x</b>	<b>2.6x</b>	<b>2.1x</b>	<b>2.1x</b>	<b>1.9x</b>

Source: District

<sup>1</sup> These numbers are based on the District's year end audited financial statements and may differ from the historical numbers shown on Page 15 hereof and Table 10 of the Feasibility Report. These differences are due to presentation requirements for auditing purposes.

<sup>2</sup> Audited figures exclude Build America Bond federal subsidy payments from nonoperating revenues and reduce the total annual debt service figure by the corresponding amount.

**Pro Forma Statement of Pledged Revenues and Debt Service Coverage**

The following table shows pro forma statements<sup>(1)</sup> showing projected wastewater revenues and expenditures and debt service coverage on existing and anticipated revenue bonds during the last and current Fiscal Year and the next two Fiscal Years.

**COMPARISON OF PROJECTED PLEDGED REVENUES  
AND PROJECTED DEBT SERVICE COVERAGE<sup>(1)</sup>**  
(In Thousands)<sup>(2)</sup>

	<u><b>FY 2017</b></u> <i>Actual</i>	<u><b>FY 2018</b></u> <i>Projected</i>	<u><b>FY 2019</b></u> <i>Projected</i>	<u><b>FY 2020</b></u> <i>Projected</i>
Total Service Charge Revenue	\$324,918	\$359,039	\$393,161	\$431,602
Other Operating Revenue	7,072	4,480	5,213	4,831
Connection Fee Revenue	<u>1,479</u>	<u>1,217</u>	<u>1,229</u>	<u>1,242</u>
<i>Subtotal: Other Miscellaneous Revenue</i>	\$8,551	\$5,697	\$6,442	\$6,072
Interest Income Reserve	\$252	\$252	\$252	\$252
Interest Income Other <sup>(3)</sup>	<u>2,205</u>	<u>2,279</u>	<u>2,279</u>	<u>2,279</u>
Total Revenue	\$335,926	\$367,267	\$402,134	\$440,206
General Operating Expenses	\$150,090	\$157,185	\$162,085	\$167,113
Other Operating Expenses	<u>18,745</u>	<u>14,948</u>	<u>12,025</u>	<u>12,172</u>
Subtotal Operating Expenses	\$168,835	\$172,133	\$174,110	\$179,285
Net Revenue Available for Debt Service	\$167,091	\$195,134	\$228,024	\$260,921
Actual and Projected Debt Service (Payments To Bondholders)				
Senior Bonds	\$58,182	\$68,649	\$82,664	\$99,225
Subordinate SRF Bonds	<u>31,178</u>	<u>33,029</u>	<u>37,235</u>	<u>38,348</u>
Total Projected Debt Service	\$89,360	\$101,678	\$119,899	\$137,573
Total Projected Senior Debt Coverage	2.87x	2.84x	2.76x	2.63x
Total Projected Coverage for all Debt	1.87x	1.91x	1.90x	1.90x

Source: Feasibility Report

(1) See **Appendix D** – Feasibility Report page D-33 for detailed discussion of principal assumptions upon which projections are based.

(2) For the purposes of this Official Statement figures have been rounded.

(3) Includes interest earned from the Missouri-American Water Company.

### Flow of Funds

***Bond Ordinance Funds and Accounts.*** The Bond Ordinance establishes or ratifies the establishment of the following funds and accounts and provides that the moneys deposited in such funds and accounts are held by U.S. Bank, N.A., St. Louis, Missouri, as the depository (the “**Depository**”) for the account of the District, in trust for the purposes set forth in the Bond Ordinance:

(1) The Metropolitan St. Louis Sewer District Wastewater Revenue Fund (the “**Revenue Fund**”);

(2) The Metropolitan St. Louis Sewer District Wastewater Sinking Fund (the “**Sinking Fund**”), and within such Sinking Fund a Payments Account (held by The Bank of New York Mellon Trust Company, N.A.) and a Debt Service Reserve Account;

(3) The Metropolitan St. Louis Sewer District Wastewater Renewal and Extension Fund (the “**Renewal and Extension Fund**”);

(4) The Metropolitan St. Louis Sewer District Wastewater Rebate Fund (the “**Rebate Fund**”), and within such Rebate Fund a Series 2017A Rebate Account; and

(5) The Metropolitan St. Louis Sewer District Wastewater Project Fund (the “**Project Fund**”), and within such Project Fund a Series 2017A Project Account and a Series 2017A Costs of Issuance Account.

In addition to the funds described directly above, the Escrow Agreement (as defined herein) establishes the “Escrow Fund for The Metropolitan St. Louis Sewer District, Wastewater System Revenue Bonds, Series 2011B, Series 2012, Series 2013B and Series 2015B” (the “**Escrow Fund**”) to be held and administered by the Escrow Agent (as defined herein) in accordance with the provisions of the Escrow Agreement.

***Deposits to and Uses of Moneys in the Revenue Fund.*** The Bond Ordinance requires that the District deposit all Operating Revenues into the Revenue Fund from time to time as and when received. The Bond Ordinance also requires that the District apply moneys in the Revenue Fund, prior to the occurrence and continuation of an Event of Default under the Bond Ordinance, in the following order of priority:

- (1) to pay Expenses of Operation and Maintenance;
- (2) to deposit into the Sinking Fund the amounts required by the Bond Ordinance, as described below under the heading captioned “**Deposits to and Uses of Money in the Sinking Fund**”;
- (3) to make Replenishment Payments (as defined herein) to the Debt Service Reserve Account and to pay to any Credit Facility Provider any amounts due under any Credit Facility Agreement, including Additional Interest;
- (4) to deposit into the Rebate Fund the amounts required by the Bond Ordinance;
- (5) to pay any amounts due any Reserve Account Credit Facility Provider pursuant to a Reserve Account Credit Facility Agreement;
- (6) to deposit the amounts required to be deposited into the funds and accounts created by any Series Ordinance authorizing the issuance of Subordinate Bonds, for the purpose of paying Principal of (whether at maturity, upon mandatory redemption or as otherwise required by a Series Ordinance relating to Subordinate SRF Bonds) and interest on Subordinate Bonds, making Hedge Payments under Subordinate Hedge Agreements, and accumulating reserves for such payments;
- (7) to make Accumulation Payments to the Debt Service Reserve Account in accordance with the Bond Ordinance; and
- (8) to pay any amounts required to be paid with respect to any Other System Obligations.

In addition to, and after, the deposits described above, the District may from time to time deposit into the Renewal and Extension Fund any moneys and securities held in the Revenue Fund in excess of 45 days' estimated Expenses of Operation and Maintenance.

If at any time the amounts in any account of the Sinking Fund are less than the amounts required by the Bond Ordinance, and there are not on deposit in the Renewal and Extension Fund available moneys sufficient to cure any such deficiency, as described herein under the subsection captioned **"Deposits to and Uses of Moneys in the Renewal and Extension Fund,"** then the District shall withdraw from the funds and accounts of the District relating to Subordinate Bonds which are not Subordinate SRF Bonds and deposit in such account of the Sinking Fund, as the case may be, the amount necessary (or all the moneys in such funds and accounts, if less than the amount required) to make up such deficiency.

***Deposits to and Uses of Moneys in the Sinking Fund.*** After the District deposits all Operating Revenues into the Revenue Fund and applies such moneys to pay Expenses of Operation and Maintenance, then the Master Bond Ordinance provides for deposits to and uses of moneys in the accounts and subaccounts in the Sinking Fund as follows:

***Payments Account – General.*** Sufficient moneys shall be paid in periodic installments from the Revenue Fund into the Payments Account for the purpose of paying the Principal of and interest (excluding Additional Interest) on the Senior Bonds as they become due and payable and for the purpose of making Hedge Payments under Senior Hedge Agreements. Amounts held in the Payments Account shall be used solely to pay interest (excluding Additional Interest) and Principal of the Senior Bonds as the same become due and payable (whether at maturity or upon redemption) and to pay Hedge Payments under Senior Hedge Agreements when due. As of the date of this Official Statement, there are no Senior Hedge Agreements in effect.

***Interest.*** Except as otherwise provided in any Series Ordinance authorizing Senior SRF Bonds, on or before the 30th day preceding each Interest Payment Date for Senior Bonds (or, in the case of Senior Bonds bearing interest at a Variable Rate, on or before the Business Day preceding each Interest Payment Date), the District shall deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment and, in the case of Senior SRF Bonds, anticipated investment earnings on reserve funds held by a bond trustee relating to such Senior SRF Bonds, is not less than the interest (excluding Additional Interest) coming due on such Senior Bonds on such Interest Payment Date. The District shall also deposit and continue to deposit all Hedge Receipts under Senior Hedge Agreements in the Payments Account from time to time as and when received.

***Principal.*** Except as otherwise provided in any Series Ordinance authorizing Senior SRF Bonds, on or before the 30th day preceding each Principal Maturity Date for Senior Bonds, the District shall deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than the Principal coming due on such Senior Bonds on such Principal Maturity Date.

***Hedge Payments.*** On or before the 30th day preceding each payment date for Hedge Payments under Senior Hedge Agreements, the District shall deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than such Hedge Payments coming due on such payment date.

***Application of Moneys in Payments Account.*** No further payments need be made into the Payments Account whenever the amount available in the Payments Account, if added to the amount then in the Debt Service Reserve Account (without taking into account any amount available to be drawn on

any Reserve Account Credit Facility), is sufficient to retire all Senior Bonds then Outstanding and to pay all unpaid interest accrued and to accrue prior to such retirement. No moneys in the Payments Account shall be used for or applied to the optional purchase or redemption of Senior Bonds prior to maturity unless: (i) provision shall have been made for the payment of all the Senior Bonds; or (ii) such moneys are applied to the purchase and cancellation of Senior Bonds which are subject to mandatory redemption on the next mandatory redemption date, which falls due within 12 months, such Senior Bonds are purchased at a price not more than would be required for mandatory redemption, and such Senior Bonds are cancelled upon purchase; or (iii) such moneys are applied to the purchase and cancellation of Senior Bonds at a price less than the amount of Principal which would be payable on such Senior Bonds, together with interest accrued through the date of purchase, and such Senior Bonds are cancelled upon purchase; or (iv) such moneys are in excess of the then required balance of the Payments Account and are applied to redeem a part of the Senior Bonds Outstanding on the next succeeding redemption date for which the required notice of redemption may be given.

***Deposits to and Uses of Moneys in the Debt Service Reserve Account.*** The Bond Ordinance provides that with respect to Senior Bonds which are not Senior Uncovered Bonds that the Debt Service Reserve Account will be funded in an amount equal to the Debt Service Reserve Requirement for the Senior Bonds which are not Senior Uncovered Bonds. The Bond Ordinance requires that the District deposit into the Debt Service Reserve Account the amounts specified in the Series Ordinances with respect to Senior Bonds. Notwithstanding the foregoing, there shall be no deposit into the Debt Service Reserve Account with respect to any SRF Bonds or Senior Uncovered Bonds nor shall the Debt Service Reserve Account secure any SRF Bonds or Senior Uncovered Bonds. **The Series 2017A Bonds are Senior Uncovered Bonds and therefore are not secured by the Debt Service Reserve Account.**

Whenever for any reason the amount in the Payments Account is insufficient to pay all interest or Principal becoming due on the Senior Bonds within the next seven days (or, in the case of Senior Bonds bearing interest at a Variable Rate, on the next Business Day), the District shall make up any deficiency by transfers first from the Renewal and Extension Fund and second from the funds and accounts of the District relating to Subordinate Bonds which are not Subordinate SRF Bonds. Whenever, on the date that such interest or Principal is due, there are insufficient moneys in the Payments Account available to make such payment on Senior Bonds (except with respect to Senior SRF Bonds and Senior Uncovered Bonds which are not secured by the Debt Service Reserve Account), the District shall, without further instructions, apply so much as may be needed of the moneys in the Debt Service Reserve Account to prevent default in the payment of such interest or Principal, with priority to interest payments. Whenever by reason of any such application or otherwise (other than required Accumulation Payments, as required in the Bond Ordinance) the amount remaining to the credit of the Debt Service Reserve Account is less than the amount then required to be in the Debt Service Reserve Account, such deficiency shall be remedied by monthly deposits (“**Replenishment Payments**”) from the Revenue Fund, to the extent funds are available in the Revenue Fund for such purpose after all required transfers set forth above have been made.

The District may elect to satisfy in whole or in part the Debt Service Reserve Requirement by means of a Reserve Account Credit Facility, subject to certain requirements as set forth in the Bond Ordinance. See “**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**” in **Appendix C** hereto.

***Deposits to and Uses of Moneys in the Renewal and Extension Fund.*** All sums accumulated and retained in the Renewal and Extension Fund shall be used first to prevent default in the payment of interest on or Principal of the Senior Bonds when due and then shall be applied by the District from time to time, as and when the District shall determine, to the following purposes and, prior to the occurrence and continuation of an Event of Default, in the order of priority determined by the District in its sole



discretion: (a) for the purposes for which moneys held in the Revenue Fund may be applied pursuant to the Bond Ordinance and as described above; (b) to pay any amounts which may then be due and owing under any Hedge Agreement (including termination payments, fees, expenses, and indemnity payments); (c) to pay any governmental charges and assessments against the System or any part thereof which may then be due and owing; (d) to make acquisitions, betterments, extensions, repairs, or replacements or other capital improvements (including the purchase of equipment) to the System deemed necessary by the District (including payments under contracts with vendors, suppliers, and contractors for the foregoing purposes); (e) to acquire Senior Bonds by redemption or by purchase in the open market at a price not exceeding the callable price as provided and in accordance with the terms and conditions of the Bond Ordinance, which Senior Bonds may be any of the Senior Bonds, prior to their respective maturities, and when so used for such purposes the moneys shall be withdrawn from the Renewal and Extension Fund and deposited into the Payments Account for the Senior Bonds to be so redeemed or purchased; and (f) for any other purpose of the District.

### **Rate Covenant**

The Bond Ordinance provides that the District shall continuously own, control, operate, and maintain the System in an efficient and economical manner and on a revenue producing basis and shall at all times prescribe, fix, maintain, and collect rates, fees, and other charges for the services, facilities, and commodities furnished by the System fully sufficient at all times to:

- (1) provide for 100% of the Expenses of Operation and Maintenance and for the accumulation in the Revenue Fund of a reasonable reserve therefor; and
- (2) produce Net Operating Revenues in each Fiscal Year which, together with Investment Earnings:
  - (a) will equal at least 125% of the Debt Service Requirement on all Senior Bonds then Outstanding for the year of computation and 115% of the Debt Service Requirement on all Bonds then Outstanding for the year of computation;
  - (b) will enable the District to make all required payments, if any, into the Debt Service Reserve Account and the Rebate Fund and to any Credit Facility Provider, any Reserve Account Credit Facility Provider, and any Qualified Hedge Provider;
  - (c) will enable the District to accumulate an amount to be held in the Renewal and Extension Fund which, in the judgment of the District, is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the System, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the System; and
  - (d) will remedy all deficiencies in required payments into any of the funds and accounts established under the Bond Ordinance from prior Fiscal Years.

If the District fails to prescribe, fix, maintain, and collect rates, fees, and other charges, or to revise such rates, fees, and other charges, in accordance with these provisions of the Bond Ordinance, the owners of not less than 25% in aggregate Principal amount of the Bonds then Outstanding, without regard to whether any Event of Default shall have occurred, may institute and prosecute in any court of competent jurisdiction an appropriate action to compel the District to prescribe, fix, maintain, or collect such rates, fees, and other charges, or to revise such rates, fees, and other charges, in accordance with the requirements of the Bond Ordinance.

## Senior and Subordinate Bonds

Upon satisfaction of certain conditions, the Bond Ordinance permits the District, for specified purposes, to issue additional Senior Bonds without express limit as to principal amount, which will be equally and ratably secured on a parity basis with the Series 2017A Bonds and Outstanding Prior Senior Bonds under the Bond Ordinance. The Debt Service Requirement, as defined in the Bond Ordinance, which is used in the calculation of the additional bonds test, allows the District to take into account the anticipated receipt of U.S. Treasury Interest Subsidy payments to arrive at a net debt service figure with respect to the Series 2010B Bonds issued as “Build America Bonds.” The District may issue additional Senior Bonds in the future to finance part of the cost of capital improvements identified in the District’s CIRP. See the section herein captioned “**THE CIRP.**” The Bond Ordinance also permits the District to issue Subordinate Bonds which would be secured by a lien on the Pledged Revenues that would be junior and subordinate to the Series 2017A Bonds and any other Senior Bonds. See “**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**” in **Appendix C** hereto.

## Other Indebtedness

The Series 2017A Bonds are sewer system revenue bonds secured by and payable from Pledged Revenues on a parity with the Prior Senior Bonds. The District has also issued thirteen series of outstanding Subordinate Bonds. See the section herein captioned “**MANAGEMENT’S DISCUSSION AND ANALYSIS OVERVIEW – Outstanding Indebtedness - Other Outstanding Debt**” for a summary of the outstanding long-term debt of the District. For more information on the District’s long-term liabilities, see Note 6 in the District’s Notes to Financial Statements contained in **Appendix A** to this Official Statement.

## PLAN OF FINANCE

### Purpose of and Authority for the Series 2017A Bonds

As previously discussed herein, at special elections held on June 5, 2012 and on April 5, 2016, voters within the District approved the 2012 Authorization and 2016 Authorization, respectively. These Current Authorizations enable the District to comply with federal and State clean water requirements. The District may use the proceeds of such sewer system revenue bonds for the purpose of designing, constructing, improving, renovating, repairing, replacing and equipping new and existing District wastewater facilities.

The District will issue the Series 2017A Bonds to (a) advance refund the Refunded Bonds, (b) pay a portion of the costs of the Series 2017A Project as described below under the heading “**THE CIRP – Capital Finance Plans Contemplated Under Consent Decree,**” and (c) pay the Costs of Issuance of the Series 2017A Bonds.

The Refunded Bonds consist of (i) the Series 2011B Bonds maturing in the years 2022 through 2029, inclusive, outstanding in the aggregate principal amount of \$23,345,000, (ii) the Series 2012A Bonds maturing in the years 2023 through 2032, inclusive, except the 2030 maturity bearing interest at the rate of 2.75%, outstanding in the aggregate principal amount of \$50,060,000, (iii) the Series 2013B Bonds maturing in the years 2024 through 2029, inclusive, outstanding in the aggregate principal amount of \$26,385,000, and (iv) the Series 2015B Bonds maturing in the years 2026 through 2029, inclusive, outstanding in the aggregate principal amount of \$25,970,000. The District has elected to advance refund the Refunded Bonds pursuant to the provisions of the Master Bond Ordinance, the Series 2011B Ordinance, the Series 2012A Ordinance, the Series 2013B Ordinance and the Series 2015B Ordinance. A

portion of the proceeds of the Series 2017A Bonds will be deposited into the Escrow Fund established under an Escrow Trust Agreement dated as of December 1, 2017 (the “**Escrow Agreement**”), by and between the District and The Bank of New York Mellon Trust Company, N.A., as Escrow Agent (the “**Escrow Agent**”), and will be used by the Escrow Agent to pay the costs of refunding the Refunded Bonds. The Series 2011B Bonds being refunded will be redeemed on May 1, 2021; the Series 2012A Bonds being refunded will be redeemed on May 1, 2022; the Series 2013B Bonds being refunded will be redeemed on May 1, 2023; and the Series 2015B Bonds being refunded will be redeemed on May 1, 2025; all at a redemption price of par plus redemption premium, if any, and accrued interest to the respective redemption date pursuant to the Master Bond Ordinance and the Series Ordinances authorizing the issuance of each series of Refunded Bonds.

### **Estimated Sources and Uses of Funds**

The following table summarizes the anticipated sources and uses of funds in connection with the issuance of the Series 2017A Bonds:

#### Sources of Funds

Par amount of Series 2017A Bonds	\$316,175,000
Plus Original Issue Premium	63,791,434
Release from Debt Service Reserve Account	<u>934,325</u>
Total	<u><u>\$380,900,759</u></u>

#### Uses of Funds

Deposit to Series 2017A Project Account	\$236,396,980
Deposit to Escrow Fund under Escrow Agreement	142,275,547
Costs of Issuance <sup>1</sup>	<u>2,228,232</u>
Total	<u><u>\$380,900,759</u></u>

<sup>1</sup> Includes Underwriters’ discount.

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## DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements for all Outstanding Prior Senior Bonds, the Series 2017A Bonds, the Subordinate Bonds and total debt service on all System revenue bonds.

<b>Year Ending June 30</b>	<b>Debt Service on Outstanding Prior Senior Bonds<sup>(1)</sup></b>	<b>Debt Service on Series 2017A Bonds</b>	<b>Debt Service on Subordinate Bonds<sup>(2)</sup></b>	<b>Total Debt Service</b>
2018	\$ 62,001,598	\$ 5,915,375	\$ 32,952,090	\$ 100,869,063
2019	58,980,798	18,959,050	37,199,391	115,139,239
2020	59,074,698	18,961,600	37,294,871	115,331,169
2021	58,958,098	18,960,800	37,383,725	115,302,623
2022	56,474,848	20,607,800	37,656,608	114,739,256
2023	51,105,048	25,894,850	37,552,626	114,552,524
2024	47,418,998	29,233,875	37,639,953	114,292,826
2025	47,494,765	29,055,000	37,713,801	114,263,566
2026	47,154,065	32,563,750	34,353,454	114,071,269
2027	47,006,815	35,301,250	27,743,510	110,051,575
2028	47,730,565	35,374,250	24,048,746	107,153,561
2029	47,720,565	35,160,250	23,250,508	106,131,323
2030	67,700,065	17,630,500	20,866,918	106,197,483
2031	67,317,165	17,628,250	19,494,094	104,439,509
2032	67,358,265	17,382,750	16,906,654	101,647,669
2033	68,226,178	13,150,000	16,742,709	98,118,887
2034	68,029,278	13,148,750	16,827,914	98,005,942
2035	65,007,228	13,151,750	12,610,644	90,769,622
2036	65,041,422	13,148,000	5,973,741	84,163,163
2037	65,806,340	13,152,000	6,000,286	84,958,626
2038	65,865,360	13,152,500	2,380,060	81,397,920
2039	67,855,205	13,148,750		81,003,955
2040	67,311,450	13,150,000		80,461,450
2041	67,308,600	13,150,000		80,458,600
2042	67,309,000	13,152,750		80,461,750
2043	29,446,250	13,152,000		42,598,250
2044	19,439,750	13,151,750		32,591,500
2045	19,443,750	13,150,750		32,594,500
2046	9,544,500	13,152,750		22,697,250
2047		13,151,250		13,151,250
<b>Totals<sup>(3)</sup></b>	<b><u>\$1,579,130,667</u></b>	<b><u>\$555,892,350</u></b>	<b><u>\$522,592,302</u></b>	<b><u>\$2,657,615,320</u></b>

(1) Excludes the debt service on the Refunded Bonds. Debt service figures are reduced by a 33% federal interest rate subsidy on the District's Series 2010B Bonds for the year 2018 through 2024 and by a 35% federal interest rate subsidy thereafter. Such subsidy may be changed or eliminated at any point in the future.

(2) Amounts are net of trustee fees, DNR fees and reserve fund earnings.

(3) For the purposes of this Official Statement figures have been rounded.

## THE DISTRICT

### General

The District is organized pursuant to Article VI, Section 30 of the Missouri Constitution which empowers the people of the County and the City “to establish a metropolitan district for functional administration of services common to the area included therein.” The District is the only special district in the State established pursuant to that section of the Missouri Constitution. The Charter established the District. The District was created to provide a metropolitan-wide system of wastewater treatment and sanitary sewerage facilities for the collection, treatment and disposal of sewage to serve the City and most of the more heavily populated areas of the County. Before the District’s creation, the City, various municipalities in the County 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 in 1956 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 in the County. The District purchased the Fee Fee Trunk Sewer Company and the Missouri Bottoms Sewer Company in 1978. The District has since acquired other investor-owned or municipally-operated systems.

The District operates the fourth largest wastewater treatment system in the United States of America. The District’s service area now encompasses approximately 520 square miles including approximately all 66 square miles of the City and approximately 454 square miles (approximately 87%) of the County. Only the far western section of the County is not served by the District. The District provides sanitary sewer collection and treatment and stormwater management to a current population of approximately 1.3 million as of October 4, 2017. As of June 30, 2017, the District served approximately 426,484 accounts, including approximately 360,534 single family residences, approximately 41,697 multi-family apartments and condos, and approximately 24,253 commercial/industrial businesses. For further description of the District’s service area, see the service area map located on the back cover of this Official Statement. For certain economic and demographic information regarding the City and the County, see **Appendix B** to this Official Statement.

The Charter describes the District as “a body corporate, a municipal corporation and a political subdivision of the state.” The District’s Charter was amended in 2000 in order to update the District’s procedures and improve its operations. The amendments provided additional flexibility and structure to several aspects of District operations, including (1) establishment of an independent 15-member Rate Commission to review adjustments to the District’s wastewater and stormwater charges before the Board acts on them; (2) authorization for the District to issue revenue bonds on a District-wide basis and lowering the margin required for passage of both revenue and general obligation bonds to be consistent with the Missouri Constitution; (3) requiring a mandatory rotation of outside auditors every five years and the appointment of an internal auditor; (4) requiring a periodic independent management audit; and (5) permitting the investment of the District’s funds in the same manner as authorized by the Missouri Constitution for the investment of State funds. Other amendments to the Charter include (1) limiting the term of (a) Board trustees to two full consecutive terms plus any portion of an unexpired term (provided, however, that a Board trustee shall serve until his/her successor shall be appointed and qualified), and (b) commissioners on the three-member civil service commission (the “**Civil Service Commission**”) to two terms plus any portion of an unexpired term (provided, however, that each commissioner shall serve until his/her successor shall be appointed and qualified), (2) requiring the publication of Board vacancies, and

(3) requiring the Board to make a written report to the Mayor and Board of Alderman of the City and to the County Executive and County Council of the County on an annual basis.

Eight additional amendments to the Charter were approved by voters at the special election held on June 5, 2012. The approved changes (1) remove the actual boundaries of the District from the Charter so that boundary changes do not require Charter amendment and are kept by the Office of the Secretary-Treasurer; (2) streamline the process of forming subdistricts; (3) more clearly delineate the District's responsibility for stormwater management; (4) allow use of electronic media, or such other form of communication as may be required by Missouri law; (5) provide that the budget include a list of capital projects to be undertaken; (6) allow the District to use the design-build approach for projects; (7) provide that each Rate Commission representative organization shall serve until its successor shall be appointed and qualified; and (8) support gender neutrality.

The Charter requires the District to adopt a continuing five-year strategic and operating plan on an annual basis. The strategic and operating plan states the District's objectives for the succeeding five years and includes objective targets against which the District's performance in meeting these objectives is measured.

The District is subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. (commonly referred to and defined herein as the, "**Clean Water Act**"), the stated objective of which is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The District is also subject to the Missouri Clean Water Law, Sections 644.006 through 644.141 of the Revised Statutes of Missouri, as amended (the "**Missouri Clean Water Law**"), and other laws and regulations. The regulatory requirements are administered by the United States Environmental Protection Agency ("**EPA**") through the DNR. See the section herein captioned "**REGULATORY REQUIREMENTS.**"

## **Organization and Management**

**General.** The Charter established the Board as the governing body of the District. The Board is composed of six members, with three members appointed by the Mayor of the City and three members appointed by the County Executive of the County. No more than two trustees from each area can be of the same political affiliation. According to the Charter, 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 officers. 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 Board's standing committees include Audit, Finance, Pension, Program Management and Stakeholder Relations.

Administration of district-wide operations is by the executive staff under the direct supervision of the Executive Director. The Civil Service Commission serves in an advisory position regarding personnel administration and civil service matters, and hears appeals of disciplinary actions. The 15-member Rate Commission, an advisory body established pursuant to the amendments to the Charter adopted on November 7, 2000 (the "**Rate Commission**") makes recommendations to the Board regarding all proposed changes in wastewater rates, stormwater rates and tax rates or regarding changes in structure to the foregoing. See the section herein captioned "**MANAGEMENT'S DISCUSSION AND ANALYSIS OVERVIEW – Rate Commission and Rate Setting Process.**"

## Board of Trustees

The current members of the Board are as follows:

<u>Name</u>	<u>Current Term Expires</u>
James Faul, Chair	March 15, 2021
Rev. Ronald Bobo, Vice Chair	March 15, 2016 <sup>1</sup>
Ruby Bonner, Member	March 15, 2018
Annette Mandel, Member	March 15, 2020
James I. Singer, Member	March 15, 2017 <sup>1</sup>
Michael Yates, Member	March 15, 2014 <sup>1</sup>

<sup>1</sup> Pursuant to Section 5.010 of the District's Charter, members continue to serve until a successor is appointed.

Set forth below is certain biographical information on the members of the Board.

***James Faul, Chair (St. Louis City).*** Mr. Faul is an attorney with the law firm of Hartnett Gladney Hetterman, L.L.C. (formerly Bartley Goffstein, L.L.C.). Mr. Faul has served on the Board since April 17, 2013.

***Rev. Ronald Bobo, Vice Chair (St. Louis County).*** Reverend Bobo is the senior pastor of Westside Missionary Baptist Church and a member of the St. Louis Clergy Coalition. Reverend Bobo has served on the Board since January 12, 2016.

***Ruby Bonner (St. Louis City).*** Ms. Bonner is a former Executive Director for the St. Louis Civil Rights Enforcement Agency and has previously served as a municipal court judge and as General Counsel for the St. Louis Public School's Board of Education. Ms. Bonner has served on the Board since May 8, 2014.

***Annette Mandel (St. Louis City).*** Ms. Mandel is an attorney with the law firm of Mandel & Mandel, L.L.P and a former mayor of the City of Creve Coeur, Missouri. She has served on the Board since April 13, 2012.

***James I. Singer (St. Louis County).*** Mr. Singer is a partner in the law firm of Schuchat, Cook & Werner. Mr. Singer has served on the Board since January 12, 2016.

***Michael Yates (St. Louis County).*** Mr. Yates is the business representative for the Operating Engineers Local 148 and has served on the Board since January 17, 2012.

## Administration

Management of the District is provided by a management team that reports to the Board, including an Executive Director, Secretary-Treasurer, Assistant Secretary-Treasurer, Internal Auditor, General Counsel, and Directors of Finance, Engineering, Human Resources, Operations and Information Systems. Set forth below is certain biographical information regarding selected members of the executive management staff of the District:

***Brian Hoelscher, P.E., Executive Director.*** Mr. Hoelscher served as the District's Director of Engineering for more than nine years before his appointment as Executive Director on March 27, 2013. As the Director of Engineering, he was responsible for the delivery of the District's CIRP as well as other environmental and regulatory duties. Mr. Hoelscher held several other management positions in the District's engineering department prior to his tenure as Director of Engineering. Before joining the

District in May 1995, Mr. Hoelscher served as the St. Louis area office manager for consulting engineers Consoer, Townsend, Envirodyne Engineers of Missouri, Inc. (now AECOM). Mr. Hoelscher has a Bachelor of Science in Chemical Engineering from Washington University in St. Louis, and is licensed as a professional engineer in Missouri and Illinois.

**Tim R. Snoke, Secretary-Treasurer.** Mr. Snoke joined the District as Secretary-Treasurer in May 2014. Before becoming Secretary-Treasurer, he spent 21 years at the former Ralcorp Holdings, Inc. in various finance and treasury management positions, most recently as Assistant Treasurer. Mr. Snoke holds a Bachelor of Science degree in Business Administration from Valparaiso University and a Masters of Business Administration from Saint Louis University.

**John Strahlman, Assistant Secretary-Treasurer.** Mr. Strahlman was hired by the District in January 2015. His previous experience includes treasury management positions at Metropolitan Pier and Exposition Authority in Illinois, and at the Cook County, Illinois Treasurer's office. He holds a Bachelor of Science degree in Public Finance from Indiana University and a Masters of Business Administration from DePaul University.

**Susan M. Myers, General Counsel.** Ms. Myers has been employed by the District as in-house counsel since 2001 and was promoted to General Counsel in 2011. Prior to joining the District, she served as an environmental engineer for two years with EPA Region VII in RCRA Permitting and for nine years on a billion dollar Department of Energy Superfund clean-up project. Ms. Myers earned her law degree from the Saint Louis University School of Law and a Bachelor of Science in Geological Engineering from the University of Missouri-Rolla (currently Missouri University of Science and Technology).

**Marion M. Gee, Director of Finance.** Mr. Gee was hired by the District in September 2015. Mr. Gee most recently served as Assistant Finance Director for the City of San Antonio, Texas. He previously served as the Finance Director for the Louisville Metropolitan Sewer District for 11 years. Mr. Gee is a certified public accountant and has a Bachelor of Science in Business Administration and a Masters of Business Administration, both from the University of Louisville.

**Richard Unverferth, P.E., Director of Engineering.** Mr. Unverferth has served as the District's Director of Engineering since May 2013. Prior to his current position, he held numerous positions in the District's Engineering and Operations departments. Mr. Unverferth has a Bachelor of Science in Civil Engineering from the University of Missouri-Rolla (currently Missouri University of Science and Technology), and is a licensed professional engineer in Missouri.

**Vicki L. Taylor Edwards, Director of Human Resources.** Ms. Edwards has served as the Director of Human Resources at the District since 2001. Before her promotion to her current position, Ms. Edwards held several other positions within the human resources department. Before joining the District, she was with Mercantile Bancorporation Inc. as acquired by Firststar Corporation in Missouri for seventeen years in human resources. Ms. Edwards received her Bachelor Degree from Lindenwood University in Human Resources Management.

**Barbara Mohn, Director of Information Systems.** Ms. Mohn was named the District's Director of Information Systems in September 2006, and has extensive experience in the information technology field, primarily in the telecommunications and financial services industries. Her most recent position was IT Director – Program Management for General Electric Commercial Distribution Company. Before that, she held positions at Deutsche Financial Services, CIBER Consulting and AT&T. Ms. Mohn has a Bachelor of Science in Business Administration from Southeast Missouri State University and a Masters of Business Administration from the University of Central Florida.



***Jonathon Sprague, P.E., Director of Operations.*** Mr. Sprague has been the Director of Operations for the District since July 2007. He joined the District in May 2005 as Assistant Director of Operations with more than 15 years of experience in public utilities management. Mr. Sprague has a Bachelor of Science in Electrical Engineering from The University of Akron and a Masters of Business Administration from the College of William and Mary.

## **The System**

The District owns and operates the System, which consists of sanitary, stormwater and combined collection sewers, pumping stations, and wastewater treatment facilities in its service area. The District provides sewer collection, pumping and treatment services within three major watersheds located within the District's service area, including the Mississippi River watershed, the Missouri River watershed and the Meramec River watershed. In addition, the District provides a variety of other services, including sanitary sewer maintenance, stormwater sewer maintenance, floodwater control, monitoring of industrial waste, issuance of pretreatment discharge permits, engineering design and specification, construction of sewer lines, plan review and approvals, issuance of connection permits, public education and customer service.

***Collection and Trunk Sewers.*** As of July 2017, the District operates and maintains 9,400 miles of collection and trunk sewers and force mains, ranging in size from six inches to 29 feet in diameter. They are classified as one of three types: sanitary, storm or combined. Sanitary sewers accommodate household and industrial waste. Storm sewers carry rainwater and surface water runoff. Combined sewers carry both types of waste. The System currently includes approximately 4,700 miles of sanitary sewers and force mains, approximately 3,000 miles of stormwater sewers and improved channels, and approximately 1,700 miles of combined sewers that handle both wastewater and stormwater flows. Maintenance of the System is controlled and conducted out of three regional facilities.

***Pumping Stations and Force Mains.*** The District currently owns and maintains 275 pumping stations and 122 miles of force mains which are included in the sewer system totals above. Pump station and force main support is divided into three geographic regions under a pump station manager. All pump stations are maintained regularly and monitored continuously by telemetry. Of the 275 stations, 36 are floodwall (overflow regulation), 16 sanitary wet weather relief stations, 4 are stormwater and the remaining 219 are sanitary and combined sewage pump stations which move the flow of wastewater through the wastewater system and into District treatment plants.

***Wastewater Treatment Facilities.*** The District currently owns and operates seven wastewater treatment facilities. These facilities treated an average flow of 318 million gallons of wastewater per day for the District's previous five Fiscal Years 2013 to 2017. The Bissell Point and Lemay wastewater treatment plants are the District's two largest plants. Both of these plants serve the Mississippi River watershed. The Coldwater Creek and Missouri River wastewater treatment plants service the Missouri River watershed. The remaining wastewater treatment plants serve the Meramec River watershed.

## **Employees and Employee Relations**

The District had 1,018 budgeted positions for Fiscal Year 2018, of which 951 are filled. Approximately 86% of the District's employees within the Operations Department are represented by one of six unions: American Federation of State, County and Municipal Employees; Bricklayers; International Association of Machinists; International Brotherhood of Electrical Workers; Operating Engineers; and Service Employees International. The District had one labor dispute in 1977. For more than the past 35 years, the District has had no record of any labor dispute or work stoppage and considers its employee relations to be excellent. The District entered into new collective bargaining agreements with the six

unions in 2016, each of which extend through June 30, 2020. Salary increases between FY 2017 and FY 2020 average 3% annually. The District also retains private companies and consultants from time to time to supplement and expand its existing staffing resources.

### **Economic Conditions in the District**

Generally, the District's major revenue sources do not fluctuate with the local and national economies as much as local governments that depend on sales or income taxes for their major sources of revenue. The District uses several measures to forecast economic development in the District. Such factors are listed below for Fiscal Years 2013 through 2017:

	<u><b>2013</b></u>	<u><b>2014</b></u>	<u><b>2015</b></u>	<u><b>2016</b></u>	<u><b>2017</b></u>
<b>Sewer Plan Reviews:</b>					
Number of Plans Approved	447	487	529	613	523
Number of Miles of Sewers	22	36	22	38	34
<b>Sewer Construction Permits:</b>					
Number of Permits Issued	2,020	3,472	3,447	4,546	3,740
Number of Miles of Sewers	19	29	33	30	24
<b>Customer Connections:</b>					
Number of Connection Permits Issued	1,345	1,764	2,017	2,165	1,891
Connection Fee Revenue	\$1,058,063	\$1,543,209	\$1,808,160	\$1,691,032	\$2,076,413
<b>Value of Sewers Dedicated to the District by Developers</b>					
	\$17,510,735	\$6,873,732	\$12,304,126	\$11,271,085	\$6,807,147

Source: The District

Over the years, the City and County's economies have each undergone a transformation from reliance on traditional manufacturing industries to those industries based on advanced technology and service. The St. Louis area is a center for health care, banking, finance, transportation, tourism, and education and has a strong and diverse manufacturing economy. For more information on economic and demographic trends in the City and the County, see **Appendix B** hereto.

### **Security**

The System is subject to safety and security inspections on a continuing basis by the District. All treatment plants are maintained as secure facilities with fences, locked gates and electronic surveillance equipment. The District does not represent that any existing or additional safety or security measures will be adequate in the event that terrorist activities are directed at the System. Further, damage to components of the System could have a material adverse impact on the District's expenditures for repairs to the System.

### **Insurance**

The District maintains third-party commercial insurance coverage for various risks while self-insuring for other risks and liabilities. Presently commercial insurance coverage is maintained for officers', directors' and general liability, property, boiler and machinery, excess flood, combined liability, cyber liability, business auto liability, excess liability, excess workers' compensation, public entity fiduciary liability, crime, major facility pollution liability and sewer backup (blocked line and overcharged line). Such policies contain liability limits, deductions and retentions that management of the

District believes to be customary for similar enterprises. Total premiums for third-party insurance coverage for Fiscal Year 2017 were \$3,314,005, an approximately 1.1% increase from Fiscal Year 2016.

In addition, the District has established a risk management program and self-insures a portion of the risk related to its obligation to provide workers' compensation and medical and hospitalization benefits to its employees and water backup claims of its customers. The estimated liabilities for payment of incurred (both reported and unreported) but unpaid claims relating to these matters are included in the District's financial statements as a component of current deposits and accrued expenses. As of June 30, 2017 and 2016, these liabilities amounted to \$4,461,069 and \$4,076,994 respectively. 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. For more information regarding the District's self-insurance program, see Note 10, Self-Insurance Programs, to the District's Notes to Financial Statements contained in **Appendix A** to this Official Statement.

## **THE CIRP**

### **General**

The District developed the CIRP in 2004 which identifies proposed expenditures by the District for capital improvements to the District's sewer facilities over the next several decades. The general objectives of the CIRP are to meet federal and State requirements and District policy regarding water pollution control, to provide a satisfactory level of service to users of the District's sewer system, including reduction of building back-ups, and to continue the District's program to rehabilitate its infrastructure system. The CIRP addresses the District's infrastructure capital improvement projects involving the construction, repair, replacement and upgrade of sanitary and combined sewers, forcemains, pump stations, tanks, tunnels, treatment plants, and stormwater sewers. The District has designated the portion of the CIRP improvements agreed to under the Consent Decree (as defined herein), hereinafter defined, as "**Project Clear**." Project Clear has an estimated cost of approximately \$4.7 billion (in 2010 dollars). As of November 1, 2017, the District has met all requirements related to Project Clear dictated by the Consent Decree within mandated deadlines and within budget.

### **Historical Capital Improvement Expenditures**

Before 2004, the District financed substantially all of the capital improvements to its facilities from available revenues on a "pay-as-you-go" basis. Since Fiscal Year 2004 the District has paid for more than \$2.2 billion in capital improvements through a combination of debt financing and "pay-as-you-go" financing. Since the District began implementation of the CIRP in 2004, the District has completed project improvements in the following categories:

- increasing wastewater treatment capacity;
- increasing quality of treatment levels to meet new regulations;
- finishing construction of a new wastewater treatment plant;
- improving infrastructure to reduce combined sewer overflows;
- improving infrastructure to reduce sanitary sewer overflows; and
- rehabilitating and replacing aging infrastructure.

### **Financing Plans for the CIRP**

There are two primary funding sources for financing the capital improvements identified in the CIRP: (1) debt, including Bonds issued under the Bond Ordinance; and (2) available Operating Revenues on a "pay-as-you-go" basis. The District will use the proceeds of previously issued Bonds, a portion of

the proceeds of the Series 2017A Bonds and any Bonds issued by the District in the future under the Bond Ordinance to finance the infrastructure projects identified in the CIRP.

The voters approved the issuance of \$775,000,000 of sewer system revenue bonds, all of which have been issued in furtherance of the CIRP, at special elections held on February 3, 2004 and on August 5, 2008 (the “**Prior Authorizations**” together with the Current Authorizations being referred to herein as, the “**Authorizations**”). As previously discussed herein, at special elections held on June 5, 2012 and on April 5, 2016, voters within the District approved the 2012 Authorization and 2016 Authorization, respectively, in furtherance of the CIRP. After the issuance of the Series 2017A Bonds, all of the bonds relating to the 2012 Authorization will have been issued and the remaining amount of the 2016 Authorization will be \$747,500,000.

The following table sets forth voter approval percentages at the special election for each Authorization.

<u>Year of Election</u>	<u>Percentage in Favor of Each Authorization</u>
2004	68%
2008	75%
2012	85%
2016	76%

Major projects constructed with proceeds of the Prior Authorizations were the Lower Meramec Treatment Plant, \$177,000,000; Coldwater Creek Treatment Plant Improvements, \$61,000,000; Missouri River Plant Rehab and Improvements, \$52,000,000; Grand Glaize Plant Improvements, \$35,000,000; Other Treatment Plant Improvements, \$24,000,000; CSO/SSO Collection System Improvements, \$80,000,000; and the Lemay Plant Improvements, \$40,000,000.

Major projects constructed or under construction with proceeds of the 2012 Authorization to date include: Maline Creek CSO BP 051 & 052 Local Storage Facility (Chair of Rocks Drive to Church Drive), \$86,000,000; Lemay Pump Station No. 1 Redundant Force Main, \$25,000,000; Coldwater Sanitary Relief Section B, C, and D Wet Weather Storage Facility Tank C, \$20,000,000; Lemay WWTP Secondary Improvements, \$15,000,000; completion of the Missouri River WWTP Secondary Treatment Expansion and Disinfection, \$20,000,000; Maplewood – Blendon Combined Sewer Relief, \$11,000,000; Bissell & Lemay WWTP Incinerator Scrubber Replacement, \$8,000,000; and FF-11 Fee Fee Creek Sanitary Relief, \$7,000,000.

Major projects to be constructed with the proceeds of the 2016 Authorization include: Lower Meramec River System Improvements – Baumgartner to Fenton WWTF Tunnel, \$210,000,000; Deer Creek Sanitary Tunnel (Clayton Road to RDP), \$150,000,000; Maline Creek CSO BP 051 & 052 Local Storage Facility (Chair of Rocks Drive to Church Drive), \$86,000,000; DC-02 & DC-03 Sanitary Relief (Brentwood Boulevard to Conway Road) Phases II, III, and IV, \$83,000,000; Jefferson Barracks Tunnel (Lemay WWTP to Martigney Pump Station), \$70,000,000; and Lemay No. 3 Pump Station and Force Main, \$40,000,000.

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## Total Capital Expenditures under CIRP

The following table sets forth the District's historic capital improvement expenditures for improvements to the System for Fiscal Years 2008 through 2017, including expenditures funded both by Bond proceeds and on a "pay-as-you-go" basis:

<b><u>Fiscal Year Ending June 30</u></b>	<b><u>Capital Improvement Expenditures<sup>(1)</sup></u></b>
2008	\$147,953,723
2009	182,150,854
2010	116,125,747
2011	99,958,334
2012	134,909,742
2013	151,321,500
2014	158,323,507
2015	196,100,162
2016	216,933,464
2017	<u>252,375,421</u>
<b>Total:</b>	<b><u>\$1,656,152,454</u></b>

Source: The District.

<sup>(1)</sup> Since separate wastewater and stormwater statements were not prepared prior to Fiscal Year 2009, the capital improvement expenditures from Fiscal Year 2008 represent the payments for all capital improvements to the District's sanitary, stormwater and combined collection sewers, pumping stations and wastewater treatment facilities. Fiscal Year 2009 through Fiscal Year 2017 represent Wastewater Capital Expenditures only.

## Capital Finance Plans Contemplated Under Consent Decree

The District identified an estimated \$4.7 billion (in 2010 dollars) in capital improvement needs for wastewater system improvements which are to be constructed over a 23-year period. The Board has approved a budget that identified proposed expenditures by the District for wastewater capital improvements of approximately \$329 million through the District's Fiscal Year ending June 30, 2018, for a portion of the projects that are included in the CIRP. The District estimates that the cost of the projects identified in the CIRP for the period from Fiscal Year 2018 through Fiscal Year 2020 will be approximately \$1.1 billion.

Approximately 25% of the total major capital improvement expenditures for Fiscal Year 2018 to Fiscal Year 2020 are anticipated to be from operating revenues and the drawdown of available fund balances and the remaining approximately 75% is expected to be funded by the issuance of additional debt pursuant to the 2012 Authorization and the 2016 Authorization as further described herein.

The District's capital program in Fiscal Year 2018 includes more than 100 projects, a portion of which will be financed with the proceeds of the 2017A Bonds (the "**Series 2017A Project**"), "pay-as-you-go" revenues of the System and future financings under the Bond Ordinance. Among these projects, some of which are multi-year efforts, are the following projects which are budgeted at \$4 million or more in Fiscal Year 2018:

<b>Project Name</b>	<b>Task Description</b>	<b>Budget Amount</b>
Deer Creek Sanitary Tunnel (Clayton Road to RDP)	Construction	\$50,000,000
Maline Creek CSO 051 & 052 Local Storage Facility (Chain of Rocks Drive to Church Drive)	Construction (Supplemental Appropriation)	29,000,000
Jefferson Barracks Tunnel (Lemay WWTP to Martigney PS)	Construction (Supplemental Appropriation)	26,100,000
DC-02 & DC-03 Sanitary Relief (Brentwood Boulevard to Conway Road) Phase II	Construction	17,000,000
FF-16 Schuetz – Meadowside to Page Sanitary Relief	Construction	12,300,000
Construction Management Services – Lower Meramec and Deer Creek Tunnels	Professional Services	7,500,000
Construction Management Services – Tank/Treatment/Pump Station Facilities	Professional Services	7,360,000
Upper Maline Trunk Sanitary Relief Phase IV Section B	Construction	7,000,000
Caulks Creek Forcemain (River Valley Road to L-52)	Construction	6,600,000
FF-18 Villa Dorado – Lackland – Page Sanitary Relief (Adie Road to Villa Dorado Drive)	Construction	6,590,000
Harlem – Baden Relief Phase IV (Herbert) (Improvements from Basin to Hamilton Trunk)	Construction (Supplemental Appropriation)	6,500,000
Deer Creek Public I/I Reduction (2018) Contract A	Construction	6,500,000
Caulks Creek Pump Station B Forcemain	Construction	6,000,000
Infrastructure Repairs (Wastewater) (2018)	Work Order Repair Costs (Capital)	6,000,000
Coldwater Creek WWTF Final Clarifiers Replacement	Construction	5,500,000
CSO – McKnight Road #2737 CSO Interceptor (I298)/Outfall (L-161)	Construction	5,370,000
CSO Volume Reduction Green Infrastructure	Construction	5,000,000
DC-02 & DC-03 Sanitary Relief (Brentwood Boulevard to Conway Road) Phase I	Construction (Supplemental Appropriation)	4,000,000

Source: The District

Other planned CIRP improvements in Fiscal Years 2018 through 2020 expected to be included in the approximately \$1.1 billion of capital projects during this timeframe include the following:

- infrastructure improvements to reduce combined sewer overflows;
- infrastructure improvements to reduce sanitary sewer overflows;
- collection systems renewal and replacement activity; and
- planning and capacity, management, operation and maintenance activity.

See **Appendix D – “FEASIBILITY REPORT – CIRP Financing”** for a summary of the projected CIRP Financing Plan for Fiscal Years 2016 through 2020.

## **FINANCIAL OPERATIONS OF THE DISTRICT**

### **General**

The District is supported by various taxes and user charges imposed on taxpayers and users of its facilities within its boundaries. The District has the power, subject to voter approval, to issue general obligation bonds, District-wide revenue bonds, sub-district revenue bonds, or special assessment bonds.

The Executive Director is responsible for preparing the annual budget of the District and is responsible for drawing warrants to meet the financial obligations of the District. The Executive Director appoints the Director of Finance, who is responsible for assisting the Executive Director in preparing the annual budget, maintaining the accounting records of the District, and certifying that all warrants are proper and valid under the District's Charter. The Secretary-Treasurer is appointed by the Board and is responsible for custody of the funds of the District and investing the funds of the District pursuant to the Charter of the District and State law.

### **Budget and Appropriation Process**

The Executive Director of the District is responsible for preparing the District's annual budget. Not later than the fifteenth day of March in each year, the Executive Director must submit to the Board a budget for the ensuing year. The Charter requires that the Board adopt the budget no later than June 30. In the event that the Board does not pass a new budget by June 30, the prior year's budget continues in force until the Board adopts a new budget. The proposed budget is available for public inspection and the District conducts public hearings on the proposed budget prior to its adoption. On or before the thirtieth day of June in each Fiscal Year the Board determines the amount of taxes that will be required during the next succeeding Fiscal Year to pay the principal of and interest on general obligation bonds issued and certain costs of operations, maintenance, construction and improvements. At this time, there are no general obligation bonds outstanding. The budget provides a complete financial plan for the budget year for all District funds. In no event can the total amount of expenditures for the budget year from any fund exceed the estimated revenues to be actually received plus any unencumbered balance or less any deficit estimated for the beginning of the budget year. After submittal of the budget to the Board, the Board must hold a public hearing at least 21 days before adoption of the budget in order to obtain public comment on the proposed budget.

The Board instituted "zero-based budgeting" in the development of the District's annual budget. This budgeting process breaks the District's budget into two distinct sections: (i) a base budget representing the cost to run basic operations and (ii) an incremental budget representing initiatives that are tied directly to the District's Strategic Business and Operating Plan. Both sections undergo multiple reviews to ensure that planned expenditures are justified and appropriate for the supported business activity. For the incremental budget, an expenditure cannot be justified solely by a like expenditure in a previous year; the expenditure has to clearly support a business objective from the District's Strategic Business and Operating Plan. The use of zero-based budgeting has played a strong part in helping to keep key areas of the District's budget at or below the rate of annual inflation.

### **Finance Department**

The Finance Department is enhancing its efforts to substantially reduce its portfolio of accounts receivable, using a combination of internal collection efforts, liens and service shut-off. In addition, a portion of the District's billing and past-due collections has been outsourced to several outside vendors (collection agencies and law firms). These agencies and firms focus on collecting overdue sewer bills

from rate payers and during Fiscal Year 2017 they collected approximately \$21.9 million on behalf of the District.

The Government Finance Officers Association of the United States of America and Canada has honored the District for excellence in budgeting, financial accounting and full disclosure. In 2017, for the 30th consecutive year, the District earned the Distinguished Budget Presentation Award, the highest form of recognition in governmental budgeting. In 2017, for the 29th consecutive year, the District also received the Certificate of Achievement for Excellence in Financial Reporting, the highest recognition in governmental accounting and financial reporting.

## **Fund Structure**

The General Fund was established to provide for the ordinary operations of the District. Since 1978, all operation and maintenance has been funded out of the General Fund. The General Fund receives revenues from ad valorem property taxes levied on all property, real and personal, within the District's boundaries based on assessed valuations established by the City and County assessors. Tax rates vary by subdistrict and purpose, and are levied in accordance with the Charter of the District. The District discontinued levying real and personal property taxes after Fiscal Year 2008 as a result of the impervious stormwater charge which it began collecting in March 2008. The District rescinded its stormwater impervious charge as a result of a July 9, 2010 court decision which declared the charge unconstitutional. Property taxes were reinstated effective December 31, 2010, to partially replace this stormwater funding. On April 5, 2016, a special election was held in which 62% of voters in the District's service area approved Proposition S. The approval of Proposition S put all District customers under the same property tax rates to pay for stormwater service and, in turn, all District customers would receive the same level of stormwater service. This process occurred gradually throughout Fiscal Year 2017. Proposition S allows the District to rollback and eliminate several existing taxes, eliminate the stormwater fee and, in lieu of these funding mechanisms, institute or leave in place two taxing districts that cover the District's entire service area; however, stormwater revenues do not constitute Pledged Revenues securing and payable to the Series 2017A Bonds. Currently, a main source of income for the General Fund is a wastewater user charge. The General Fund also receives miscellaneous income from a number of sources, and reimbursement of engineering services provides other non-operating funds.

The District's Revenue Funds consist of the Wastewater Revenue Fund and the Stormwater Revenue Fund. Wastewater user charge revenues are deposited into the Wastewater Revenue Fund and revenues from the District's stormwater service charge are deposited into the Stormwater Revenue Fund. The District also maintains two emergency funds – the Wastewater Emergency Fund and the Stormwater Emergency Fund. These funds were created for the purpose of providing funding for emergency work or repairs requiring prompt attention in the operation and maintenance of the District. The work or repairs are of such a nature as to be non-measurable in the budgeting and appropriation of annual revenues. District policy requires minimum balances of \$500,000 and \$250,000 be maintained in the Wastewater Emergency Fund and the Stormwater Emergency Fund, respectively. As of June 30, 2017, the Wastewater Emergency Fund and the Stormwater Emergency Fund had fund balances of \$2,979,435 and \$2,175,290, respectively.

## **Basis of Accounting**

The accounts of the District are maintained on the full accrual basis and are reported as a single enterprise. Separate accounting records are maintained for certain subdistricts and to account for restricted resources; however, interorganizational transactions and balances are eliminated for reporting purposes.



## Financial Statements

The accounts of the District are audited annually by an independent firm of certified public accountants. The accounting firm of CliftonLarsonAllen LLP served the District as auditor for the Fiscal Year ended June 30, 2017. The District's audited financial statements for the Fiscal Year ended June 30, 2017, which includes audited financial statements for the Fiscal Year ended June 30, 2016 that were audited by other auditors, are attached hereto as **Appendix A**.

## Cash and Investments

The following table shows the historic cash and investments for the previous five Fiscal Years.

	<u><b>FY 2013</b></u>	<u><b>FY 2014</b></u>	<u><b>FY 2015</b></u>	<u><b>FY 2016</b></u>	<u><b>FY 2017</b></u>
Unrestricted Cash & Investments (Current)	\$149,343,613	\$188,544,191	\$132,950,967	\$182,927,020	\$286,332,159
Total Unrestricted Cash & Investments	\$238,236,371	\$257,118,093	\$298,732,325	\$339,921,143	\$347,607,159
Days Cash on Hand (No Long-Term Unrestricted)	372	449	297	397	619
Days Cash on Hand (Adds Long-Term Unrestricted)	594	612	668	737	751

## MANAGEMENT'S DISCUSSION AND ANALYSIS OVERVIEW

### For the Years Ended June 30, 2017 and 2016

The Comprehensive Annual Financial Report of 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 the 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 the management's knowledge of the transactions, events, and conditions reflected in the financial statements and certain of the fiscal policies that govern the District's operations.

## 2017 Financial Audit

The District's financial position improved in Fiscal Year 2017, 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 the Series 2016C Bonds, 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.

Current, restricted and other assets increased \$36.5 million or 5.2% in Fiscal Year 2017. 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 Series 2016C Bonds issued in Fiscal Year 2017. 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 Series 2016A Bonds, Series 2016B Bonds and Series 2016C Bonds issued in Fiscal Year 2017 offset by \$42.7 million for Fiscal Year 2018 Series 2016C Bond 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.

The District ended Fiscal Year 2017 with \$48.1 million in cash and cash equivalents or a decrease of \$1.1 million or 2.2% from the prior Fiscal 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 Year 2016 to Fiscal Year 2017.

Total capital assets, net of accumulated depreciation, increased by \$200.2 million or 6.6% over the prior Fiscal 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 District's Notes to Financial Statements contained in **Appendix A** to this Official Statement.

## **2016 Financial Audit**

The District's financial position improved in Fiscal Year 2016, as evidenced by the increase in net position of \$48.9 million. The improvement is due to the increases in unrestricted funds of \$42.3 million and net investment in capital assets of \$11.8 million. Unrestricted funds increased \$23.6 million from Fiscal Year 2015 due to the GASB Statement No. 68 reduction to net position in Fiscal Year 2015 and increased \$29.4 million as operating revenues increased due to rate changes and due to the insurance recoveries recorded as a result of the December 2015 rain event; however, these increases were partially offset by an increase in operating expenses of \$11.2 million (excluding depreciation) due partially to increased costs related to the December 2015 flooding. While debt increased at an amount greater than the capital to which it relates, the unspent cash received upon the issuance of the Series 2015B Bonds accounts for the net increase in the net position's net investment in capital assets. The unrestricted funds and net investment in capital asset increases were offset by a decrease in restricted funds of \$5.2 million resulting primarily from the use of excess bond reserve funds to partially advance refund existing debt.

Current, restricted and other assets increased \$78.8 million or 12.5% in Fiscal Year 2016. 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 Series 2015B Bonds issued in Fiscal Year 2016. In addition, receivables recorded for insurance recoveries due to the December 2015 rain event increased current, restricted and other assets. Capital assets net of accumulated depreciation increased by \$160.5 million or 5.5% during this Fiscal Year 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 Series 2015A Bonds and Series 2015B Bonds issued in Fiscal Year 2016, offset partially by the advance refunding of existing debt, and the increase in the District's net pension liability resulting from the implementation of GASB Statement No. 68 in Fiscal Year 2015. Net deferred outflows and inflows increased \$11.5 million or 44.4% due primarily to the cumulative effect of the implementation in Fiscal Year 2015 of GASB Statement No. 68 resulting in various pension-related transactions.

The District ended Fiscal Year 2016 with \$49.2 million in cash and cash equivalents or a decrease of \$12.6 million from the prior Fiscal 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. In Fiscal Year 2016, cash and cash equivalents include only investments with original maturities less than 91 days. Under the new policy, investments with an original maturity of greater than 90 days remain as investments until they mature and the cash is received. The retroactive change resulted in \$90.1 million, \$87.7 million and \$120.0 million from cash and cash equivalents to investments in Fiscal Years 2016, 2015, and 2014, respectively.

Total capital assets, net of depreciation expense, increased by \$160.5 million or 5.5% over the prior Fiscal 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 placed into service. Collecting and pumping plant increased \$38.5 million or 2.3% primarily for capitalization of assets including dedicated assets and infrastructure repairs. Land increased \$13.2 million or 23.3% including \$12.4 million land reclass from Lower Meramec treatment plant asset 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 \$25.5 million increase in additions offset by \$35.2 million in additional depreciation partially driven by Lower Meramec treatment plant asset reclass in February 2016 resulting in a \$12.4 million decrease in treatment plant assets which was reclassified to land and an increase of \$3.2 million in 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 District's Notes to Financial Statements contained in **Appendix A** to this Official Statement. See also **Appendix A** for a more in-depth analysis of the District's financial position.

## **Sewer Rates and Revenues**

The primary source of funding for the operation and maintenance of the District's sewerage system is a user charge. The following table shows the typical bill amount for a single family residence using 7 centum cubic-feet per month with the rates approved by the Board for the year indicated and the percentage increase in such charge over the prior year:

<b><u>Fiscal Year</u></b>	<b><u>Monthly Rate</u></b>	<b><u>Percentage Change</u></b>
2016	\$40.72	13.14%
2017	44.59	9.50
2018	49.31	10.59
2019	54.63	10.79
2020	60.44	10.64

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 its non-metered properties. Multi-family residential and commercial and industrial rates are proportionate to the single-family charge and are based on water consumption and the strength of the discharge.

## **Other Sources of Revenue**

The District has other sources of revenue not securing and pledged to the repayment of the Series 2017A Bonds. Real and personal property taxes are levied by the District. The District discontinued levying real and personal property taxes after Fiscal Year 2008 as a result of the impervious stormwater charge which it began collecting in March 2008; however, the District suspended collection of the impervious stormwater charge and resumed collection of real and personal property taxes in Fiscal Year 2011 as a result of the July 9, 2010 court decision concerning the impervious stormwater charge in which the court determined that the impervious stormwater charge was in violation of the Hancock Amendment. See page 97 of the District's Comprehensive Annual Financial Statements included as **Appendix A** to this Official Statement for a discussion of the impervious stormwater charge. In Fiscal Year 2017, the total real and personal property taxes levied for stormwater was \$31.4 million. On April 5, 2016, a special election was held in which 62% of voters in the District's service area approved Proposition S. The approval of Proposition S put all District customers under the same property tax rates to pay for stormwater service and, in turn, all District customers would receive the same level of stormwater service. This process occurred gradually throughout Fiscal Year 2017. Proposition S allows the District to rollback and eliminate several existing taxes, eliminate the stormwater fee and, in lieu of these funding mechanisms, institute or leave in place two taxing districts that cover the District's entire service area; however, stormwater revenues do not constitute Pledged Revenues securing and payable to the Series 2017A Bonds.

The District 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 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 or revenue bonds. The issuance of general obligation bonds, payable from a general tax levy on all taxable property within the District or a subdistrict, requires the approval of either a four-sevenths or two-thirds majority of the voters voting at an election held in the District or subdistrict, as the case may be. General obligation bonds outstanding cannot exceed five percent of the assessed valuation of the area benefitted. At this time, there are no general obligation bonds outstanding. Subdistricts may also issue revenue bonds, payable from user charges (which do not constitute Pledged Revenues) after a similar procedure, but require only a simple majority vote.

## **Rate Commission and Rate Setting Process**

**General.** The District's Rate Commission reviews and makes recommendations to the Board regarding all proposed changes in wastewater rates, stormwater rates and tax rates or change in the structure of any of the foregoing. Upon receipt of a rate change notice from the District pursuant to the Charter, the Rate Commission recommends changes in rates to the Board that will be necessary to pay interest and principal falling due on bonds issued to finance assets of the District, the costs of operation

and maintenance and such amounts as may be required to cover emergencies and anticipated delinquencies.

The Rate Commission has reviewed and recommended all rate increases that were approved by the Board since August 2003. On June 9, 2016, the Board increased the District's wastewater user rates effective each July 1 from 2016 through 2019. See "**Rate Increases**" below.

**Membership.** The Rate Commission consists of one representative from each of fifteen organizations within the District, each of which have been identified and designated by the Board as a "Rate Commission Representative Organization." The organizations selected by the Board are diverse and represent residential customers, commercial and industrial customers, environmental interests, labor interests, community and neighborhood organizations and nonprofit organizations. The previous Rate Commission Representative Organizations were as follows:

- Missouri Coalition for the Environment
- Missouri Industrial Energy Consumers
- North County Incorporated
- St. Louis County Municipal League
- Engineers Club of St. Louis
- League of Women Voters of St. Louis
- The Mound City Bar Association
- Missouri Botanical Garden
- Associated General Contractors of St. Louis
- Education Plus
- St. Louis Regional Chamber
- West St. Louis County Chamber of Commerce
- St. Louis Council of Construction Consumers
- Greater St. Louis Labor Council
- Lutheran Senior Services

**Term of Membership.** Pursuant to Section 7.240 of the Charter, each Rate Commission Representative Organization selected by the Board shall have the right to designate a Rate Commission Delegate to the Rate Commission for a term of six (6) years or completion of any unexpired term. The Board shall designate organizations within the District to succeed such Rate Commission Representative Organization, provided, however, that each Rate Commission Representative Organization shall serve until its successor shall be appointed and qualified. Nothing herein shall bar a Rate Commission Representative Organization from being named to successive terms.

**Rate Setting Process.** Pursuant to the Charter, whenever the District proposes or recommends a change in rates, it shall give written notice ("**Rate Change Notice**") to the Board and the Rate Commission. Upon receipt of a Rate Change Notice and after review of same, the Rate Commission shall cause at least one public hearing to be held on the record regarding the proposed rate change. The Rate Commission shall issue its rate recommendation report ("**Rate Commission Report**") to the Board and to the public no later than 120 days after receipt of a Rate Change Notice. If the Board accepts the Rate Commission Report or if the Board is deemed to have accepted a Rate Commission Report as set forth in the Charter, the Board enacts an ordinance consistent with the Rate Commission Report. The Board may reject, or fail to accept, the Rate Commission Report only upon a finding that such report does not conform to the requirements of the Charter. No ordinance to effect a change in rates shall be introduced for adoption under the Charter prior to the earlier of 45 days after receipt of the Rate Commission Report or 45 days after the date on which the Rate Commission Report is due.

Pursuant to the Charter, any change in a rate recommended to the Board by the Rate Commission must be accompanied by a statement of the Rate Commission that the proposed rate change and all portions thereof:

- (1) is consistent with constitutional, statutory or common law as amended from time to time;
- (2) enhances the District's ability to provide adequate sewer and drainage systems and facilities, or related services;
- (3) is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District;
- (4) does not impair the ability of the District to comply with applicable Federal or State laws or regulations as amended from time to time; and
- (5) imposes a fair and reasonable burden on all classes of rate payers.

### **Billing and Collections**

The District bills residential and commercial customers monthly for sewer service charges. As previously described herein (See first paragraph under **Sewer Rates and Revenues**, above), sewer bills are calculated upon several different bases, including the amount of water used each quarter, the winter quarter usage only or, when water meters are not in use, the structure of the building. For customers whose bills are based upon water usage, the District purchases data from the three water agencies serving the metropolitan area: the St. Louis City Water Division, Missouri-American Water Company and Kirkwood Water.

In the City, most single family homes and smaller multi-unit buildings are not equipped with water meters. There are also a small number of properties in the County that use well water. When no water meter reading is available, the District calculates the bill based on the attributes of the structure, including the number of rooms, toilets, baths and separate showers.

Single family residential properties that have water meters are billed based on the winter quarter water usage. The winter quarter is defined as the 3-month water meter reading taken in February, March or April. With each July sewer bill the service charges are calculated on a 91-day prorated amount using the previous winter quarter water meter reading. The monthly usage remains the same until the following July, when the process is repeated. For single-family customers who have limited income, the District offers a Customer Assistance program. For eligible customers, the monthly sewer bill is reduced by 50% each month.

Commercial and multi-unit properties are billed based on the amount of water used each quarter or, in a few cases, each month. The District's monthly bill is based on one-third of the prior quarter's reading and remains the same amount for three months. The process is repeated for the next three months. In the case of commercial properties, there is an additional compliance charge on each month's bill and the bill may include a surcharge for difficult to treat industrial waste or there may be a reduction factor, based on water used in processing and not entering the sewer system. Multi-unit property owners also have the option of being billed on the winter quarter reading or on each quarter reading.

## **Rate Increases**

Pursuant to the rate review and setting procedures discussed under the caption “**Rate Commission and Rate Setting Process**” above, the District submitted to the Rate Commission a request to increase wastewater user charge rates. A Wastewater Rate Change (the “**Rate Change**”) was presented to the Rate Commission on February 26, 2015. The Rate Commission then initiated proceedings to provide for the submission of written testimony, technical conferences, discovery procedures, a public hearing and post-hearing briefs. Pursuant to the Charter, the Rate Commission is required to submit a rate recommendation to the District’s Board of Trustees upon conclusion of its deliberations.

On July 30, 2015, the Rate Commission submitted its recommendation to the Board. In that report the Rate Commission found that the Rate Change is necessary to pay (i) interest and principal due on bonds issued to finance assets of the District, (ii) the costs of operation and maintenance of the System and (iii) such amounts as may be required to cover emergencies and anticipated delinquencies.

The Board accepted the Rate Commission’s recommendation on October 8, 2015. On June 9, 2016, by Ordinance 14395 the Board approved these recommendations for Fiscal Years 2017, 2018, 2019, and 2020.

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## Historical and Projected Sewer Rates and Charges

The following table sets forth the wastewater sewer user charge rates in effect on July 1 for Fiscal Years 2014 through 2018.

<u>Type of Monthly Charge</u>	Effective July 1, 2013 (FY 2014) <u>Actual</u>	Effective July 1, 2014 (FY 2015) <u>Actual</u>	Effective July 1, 2015 (FY 2016) <u>Actual</u>	Effective July 1, 2016 (FY 2017) <u>Actual</u>	Effective July 1, 2017 (FY 2018) <u>Current</u>
<u>Base Charge - \$/Bill</u>					
Billing & Collection Charge	\$ 3.45	\$ 3.55	\$ 3.70	\$ 5.44	\$ 6.02
System Availability Charge	<u>11.40</u>	<u>12.70</u>	<u>14.55</u>	<u>14.02</u>	<u>15.50</u>
Total Base Charge	\$ 14.85	\$ 16.25	\$ 18.25	\$ 19.46	\$ 21.52
<u>Compliance Charge (\$/Bill)</u>					
Tier 1	\$ 16.00	\$ 9.00	\$ 2.15	\$ 2.86	\$ 2.95
Tier 2	41.85	43.55	44.50	57.20	58.94
Tier 3	89.15	92.75	94.80	125.84	129.67
Tier 4	130.70	136.00	139.00	185.90	191.56
Tier 5	172.25	179.25	183.15	243.10	250.50
<u>Volume Charge</u>					
Metered (\$/Ccf)	\$ 2.50	\$ 2.82	\$ 3.21	\$ 3.59	\$3.97
Unmetered (\$/Bill)					
Per Room	1.63	1.83	2.09	2.12	2.35
Per Water Closet	6.10	6.88	7.83	7.92	8.76
Per Bath	5.08	5.73	6.53	6.60	7.30
Each Separate Shower	5.08	5.73	6.53	6.60	7.30
<u>Extra Strength Surcharges (\$/ton)</u>					
Suspended Solids over 300 mg/l	\$231.35	\$244.03	\$251.88	\$262.00	\$269.07
Biological Oxygen Demand over 300 mg/l	\$620.14	\$620.14	\$632.38	\$654.00	\$671.63
Chemical Oxygen Demand over 600 mg/l	\$310.07	\$310.07	\$316.19	\$327.00	\$335.82

Source: Feasibility Study

Key: Ccf = hundred cubic feet (approx. 748 gallons); mg/l = milligram per liter

The recommended Rate Change is for a term of four years, Fiscal Years 2017 through 2020. The Rate Commission Report states that the record of proceedings supports a finding that the District's CIRP would allow the District to meet the near-term capital improvements needs through 2020. The Rate Commission further believed that the Rate Change and/or the issuance of debt are required to comply with the Consent Decree. See **"REGULATORY REQUIREMENTS – Regulatory Matters – Consent Decree"** herein.

The following table sets forth the current sewer rates and the rate increases recommended by the Rate Commission and accepted by the Board on June 9, 2016, as to Fiscal Years 2018 through 2020.



<b>Type of Monthly Charge</b>	<b>Effective July 1, 2017 (FY 2018)</b>	<b>Effective July 1, 2018 (FY 2019)</b>	<b>Effective July 1, 2019 (FY 2020)</b>
<u>Base Charge (\$/Bill)</u>			
Billing & Collection Charge	\$ 6.02	\$ 6.67	\$ 7.38
System Availability Charge	<u>15.50</u>	<u>17.16</u>	<u>18.97</u>
Total Base Charge	\$ 21.52	\$ 23.83	\$ 26.35
<u>Compliance Charge (\$/Bill)</u>			
Tier 1	\$ 2.95	\$ 3.05	\$ 3.14
Tier 2	58.94	60.89	62.61
Tier 3	129.67	133.96	137.75
Tier 4	191.56	197.90	203.49
Tier 5	250.50	258.79	266.10
<u>Volume Charge</u>			
Metered (\$/Ccf)	\$ 3.97	\$ 4.40	\$ 4.87
Unmetered (\$/Bill)			
Per Room	\$ 2.35	\$ 2.61	\$ 2.89
Per Water Closet	8.76	9.70	10.72
Per Bath	7.30	8.08	8.93
Per Separate Shower	7.30	8.08	8.93
<u>Extra Strength Surcharges (\$/ton)</u>			
Suspended Solids over 300 mg/l	\$ 269.07	\$ 277.03	\$ 283.87
BOD over 300 mg/l	671.63	691.50	708.56
COD over 600 mg/l	335.82	345.76	354.30

Source: Feasibility Report.

Key: Ccf = hundred cubic feet (approx. 748 gallons); mg/l = milligram per liter

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## Customer Accounts

The District imposes a user charge on all customers that use its system of sewers, treatment plants and other facilities. The number of customers per category of accounts is as follows:

### Number of Customers by Type Last Ten Fiscal Years

<u>Fiscal Year</u>	<u>Single Family Residential</u>	<u>Multi- Family Residential</u>	<u>Commercial/ Industrial</u>	<u>Total Accounts<sup>2</sup></u>
2008 <sup>1</sup>	391,181	54,862	32,336	478,379
2009 <sup>1</sup>	388,791	51,441	32,161	472,393
2010	387,670	50,867	31,939	470,476
2011	362,739	43,471	24,702	430,912
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: The District.

<sup>1</sup> Due to the implementation of the impervious area stormwater charge in 2008, approximately 46,000 stormwater only accounts were billed each month. This charge was challenged and a court decision was entered on July 9, 2010. Based on that decision the 46,000 accounts are no longer billed an impervious charge.

<sup>2</sup> These numbers are based on the District's year-end financial statements and may differ from the historical numbers shown on Table 4 of the Feasibility Report. These differences are due to presentation requirements for auditing purposes.

## Largest User Charge Customers

The following table lists the District's ten largest wastewater user charge customers for the Fiscal Year ended June 30, 2017:

<u>Customer</u>	<u>User Charges</u>	<u>Percent of Total</u>
Anheuser-Busch InBev	\$5,165,348	1.57%
The City of St. Louis, Missouri	2,320,129	0.71
Washington University in St. Louis	2,042,936	0.62
Sigma-Aldrich	1,214,683	0.37
Saint 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%
<b>Grand Totals</b>	<b><u>\$328,359,526</u></b>	<b><u>100.00%</u></b>

Source: The District.

## User Charge Revenues

The following table shows the amount of wastewater user charge revenues which were billed and collected by the District for the Fiscal Years ended June 30, 2008 through June 30, 2017

<b><u>Fiscal Year</u></b>	<b><u>Wastewater Charges Billed</u></b>	<b><u>Wastewater Charges Collected</u></b>	<b><u>Collections as a % of Wastewater Charges Billed</u></b>
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

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Source: The District.

## Outstanding Indebtedness

***General Obligation Indebtedness.*** As of the date of this Official Statement, the District has no outstanding general obligation indebtedness on either a District-wide or subdistrict basis.

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**Other Outstanding Debt.** The District ended Fiscal Year 2017 with approximately \$1.35 billion in long-term sewer system revenue bond debt outstanding. The following table summarizes the outstanding long-term debt for the District at the end of Fiscal Years 2015, 2016, and 2017:

<b><u>Total Long-Term Debt Outstanding (000s)</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>2017</u></b>
<b>Prior Senior Bonds:</b>			
Series 2010B	\$85,000	\$85,000	\$85,000
Series 2011B*	47,170	45,325	43,410
Series 2012A*	225,000	220,000	214,700
Series 2012B (Refunding of Series 2004A)	139,605	137,280	134,710
Series 2013B*	150,000	149,000	146,000
Series 2015B*(Refunding of Series 2006C and Series 2008A)	-	223,855	221,355
Series 2016C	-	-	150,000
<b>Subordinate SRF Bonds:</b>			
Series 2004B	97,520	89,650	81,545
Series 2005A	4,440	4,125	3,800
Series 2006A	29,915	27,950	25,600
Series 2006B	10,260	9,565	8,860
Series 2008B	29,320	27,475	25,605
Series 2009A	18,564	17,514	16,441
Series 2010A	6,947	6,588	6,222
Series 2010C	31,644	30,024	28,361
Series 2011A	38,974	37,354	35,692
Series 2013A	52,000	49,920	47,786
Series 2015A <sup>1</sup>	-	42,623	67,149
Series 2016A <sup>2</sup>	-	-	147
Series 2016B <sup>3</sup>	-	-	8,986
<b>Bonds No Longer Outstanding</b>			
Series 2006C	60,000	-	-
Series 2008A	30,000	-	-
<b>Non-Bond Related Debt:</b>			
Energy Loan Program	<u>151</u>	<u>118</u>	<u>68</u>
<b>TOTALS:</b>	<b><u>\$1,056,510</u></b>	<b><u>\$1,203,366</u></b>	<b><u>\$1,351,437</u></b>

Source: The District.

\* Denotes Prior Senior Bonds, a portion of each series of which is anticipated to be advance refunded by the Series 2017A Bonds.

<sup>1</sup> This series was issued in an original principal amount of not to exceed \$75,000,000, of which \$69,636,735 has been drawn as of June 30, 2017.

<sup>2</sup> This series was issued in an original principal amount of not to exceed \$20,000,000, of which \$146,500 has been drawn as of June 30, 2017.

<sup>3</sup> This series was issued in an original principal amount of not to exceed \$75,500,000, of which \$8,986,258 has been drawn as of June 30, 2017.

## Employee Benefits

The District currently maintains three pension plans for its employees: (i) a noncontributory single employer defined benefit plan (the “**Defined Benefit Plan**”) providing retirement benefits as well as death and disability benefits to all full-time District employees commencing services prior to

December 31, 2010, (ii) a defined contribution plan (the “**Defined Contribution Plan**”) and (iii) a deferred compensation plan (the “**Deferred Compensation Plan**”).

A Pension Committee (consisting of two members of the District’s Board, two elected employee members and four members of the District’s management staff) administers the Defined Benefit Plan. The Defined Benefit Plan is exempt from the requirements of the Employee Retirement Income Security Act of 1974 (“**ERISA**”) and, as such, is not subject to ERISA’s reporting requirements. As a noncontributory plan, the District’s employees do not contribute to the Defined Benefit Plan. Ordinances establishing the Defined Benefit Plan provide for actuarially determined annual contributions, paid solely by the District, that are sufficient to pay benefits when due. Contributions of \$11,236,828 and \$10,096,075, excluding certain professional fees paid by the District, were made to the Defined Benefit Plan during the District’s Fiscal Year ending 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. For 2017, the actuarially determined contribution consists of (a) \$5,157,148 normal cost plus (b) \$6,364,434 amortization of the actuarial accrued assets in excess of the actuarial accrued liability and prior changes (c) multiplied by an inflation factor of 1.07, which totals \$12,328,092. For 2016, the actuarially determined contribution consists of (a) \$5,106,625 normal cost plus (b) \$4,375,209 amortization of the actuarial accrued assets in excess of the actuarial accrued liability and prior changes (c) multiplied by an inflation factor of 1.07, which totals \$10,145,562. In the 2017 valuation, the number of active members included in the valuation decreased from 665 to 626 and the number of retirees and beneficiaries increased from 691 to 717. The Funded Ratio for December 31, 2016, is 82.0%, down 5.5% from the period ended December 31, 2015. The District provides certain professional fees, office space, utilities, and other services to the Defined Benefit Plan at no cost. Other costs of administering the Defined Benefit Plan are financed from plan net assets. For more information regarding the District’s Defined Benefit Plan, see Note 7, Pension Plan, in the District’s Notes to Financial Statements contained in **Appendix A** to this Official Statement.

Effective January 1, 2011, the District started the Defined Contribution Plan for all new hires. Current employees with less than 10 years of service on December 31, 2010, could voluntarily elect to transfer from the Defined Benefit Plan into the Defined Contribution Plan. The Defined Contribution Plan provides a basic contribution of 7% of employee annual earnings and provides a matching contribution of 50% of the first 4% of earnings the employee defers into the Deferred Compensation Plan. (This is a maximum matching contribution of 2% of earnings.) Employees decide upon the investment of these contributions and investment earnings from funds offered by Vanguard. Initial participation consisted of twenty-three employees who transferred balances totaling \$70,869 from the Defined Benefit Plan. At December 31, 2016, the Defined Contribution Plan consisted of 327 participants with account balances just over \$4.9 million in net position. For more information regarding the District’s Defined Contribution Plan, see Note 8, Defined Contribution Plan, in the District’s Notes to Financial Statements contained in **Appendix A** to this Official Statement.

The District also offers its employees the Deferred Compensation Plan created in accordance with Internal Revenue Code Section 457. The Deferred Compensation Plan, available to all District employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until separation from service, or in special approved circumstances due to financial hardship as defined by the Deferred Compensation Plan. Plan assets are held in trust for the exclusive benefit of participants and their beneficiaries. As a result, the assets and liabilities of the Deferred Compensation Plan are not included in the District’s financial statements. For more information regarding the District’s Deferred Compensation Plan, see Note 8 in the District’s Notes to Financial Statements contained in **Appendix A** to this Official Statement.

## **Other Post-Employment Benefits**

The District pays 85% to 91% of the monthly group health insurance premium for the individual until the retiree becomes eligible for Medicare. During Fiscal Years 2017 and 2016, expenses of \$2,576,404 and \$2,554,734, respectively, were recognized for post-retirement health care premiums as those premiums were paid. The District's net current OPEB obligation at June 30, 2017 and 2016, respectively, were \$8,063,081 and \$7,003,477. It is estimated that for the Fiscal Year ending June 30, 2017, the District's unfunded accrued liability will be approximately \$25 million assuming a 3.75% return on investment. For more information regarding the District's OPEB plans, see Note 9 in the District's Notes to Financial Statements contained in **Appendix A** to this Official Statement. Also see the section herein captioned "**FINANCIAL OPERATIONS OF THE DISTRICT – Selected Financial Data of the District.**"

## **Tax Limitation Amendment – Hancock Amendment**

An amendment to the Missouri Constitution (the "**Hancock Amendment**") limits the rate of increase and the total amount of taxes on property which may be imposed in any year, and the limit may not be exceeded without voter approval. Provisions are included in the amendment for rolling back tax rates to produce an amount of revenues equal to that of the previous year if the definition of the tax base is changed or if property is reassessed. The tax levy on the assessed valuation of new construction is exempt from this limitation.

The Hancock Amendment also requires a political subdivision of the State to seek voter approval in order to increase any "tax, license or fee" over existing rates. A Missouri court has held that the District's current wastewater user charge structure does not constitute a "tax, license or fee" for purposes of the Hancock Amendment's voter approval requirements. Since the Series 2017A Bonds are approved by the voters, the Hancock Amendment does not prohibit an increase in the District's wastewater user charges to pay debt service on the Series 2017A Bonds.

## **REGULATORY REQUIREMENTS**

### **General**

The District is subject to the provisions of the (a) Clean Water Act, the stated objective of which is to restore and maintain the chemical, physical, and biological integrity of the nation's waters, (b) the Missouri Clean Water Law, and (c) other laws and regulations. The regulatory requirements are administered by the EPA through DNR. The District is currently not subject to the federal Safe Drinking Water Act, as amended, 42 U.S.C. 300f *et seq.*, which is also administered by the EPA.

The Clean Water Act imposes several permit and regulatory requirements on wastewater treatment systems. Public sewage treatment plant owners and operators such as the District are required to provide secondary treatment as established by federal regulation for all wastewater discharge from treatment plants into waters of the United States of America. Under the Clean Water Act, states also establish water quality standards, classifying water body uses, and pollutant control criteria to protect those uses. All sewage system discharges require National Pollutant Discharge Elimination System ("NPDES") permits specifying the permissible pollutant levels in wastewater effluent discharged from the plants. In addition to secondary treatment requirements for publicly-owned treatment plants, all discharges from plants and combined sewer overflows ("CSO") may be subject to additional stringent controls (which are then incorporated into NPDES permits) if such discharges are required to achieve the water quality standards established by the state pursuant to federal regulations. Under State law, the State also requires treatment plants to obtain state surface water discharge permits, which, in the discretion of

EPA and DNR, may be issued jointly with the NPDES permit. Major wastewater treatment systems also must adopt and enforce pretreatment regulations for industries and other non-domestic sources discharging into sewers. Treatment plants are also subject to Clean Water Act and State regulations governing sludge use and disposal.

The Clean Water Act is enforced by EPA through administrative orders and procedures. Violations may be the basis for federal lawsuits brought on EPA's behalf by the U.S. Department of Justice or by private citizens.

### **Regulatory Matters – Consent Decree**

In 2007, the Department of Justice filed suit on behalf of the EPA against the District for various alleged violations of the Clean Water Act. The District had been the subject of several investigatory actions by EPA over the prior several years. The District, EPA, DNR, represented by the Missouri Attorney General, and an environmental group allowed to intervene in the lawsuit engaged in several years of litigation. In 2011, the District and the EPA negotiated the Consent Decree (the “**Consent Decree**”) that resulted in settlement and dismissal of the original lawsuit. See Note 12, Commitments and Contingencies, in the District's Notes to Financial Statements contained in **Appendix A** to this Official Statement for additional information regarding this litigation.

The District's Board adopted Ordinance No. 13277 at its June 29, 2011, meeting that authorized the District's Executive Director and General Counsel to sign the Consent Decree. Under the Consent Decree, the District agreed to spend \$4.7 billion over the next 23 years to implement various system improvements and programs designed to eliminate or reduce overflows from the combined and separate sewer system in order to improve water quality and protect human health and the environment. Most of the improvements enumerated in the Consent Decree were already addressed in the District's long-term \$4.7 billion (in 2010 dollars) CIRP. The State did not agree to sign the Consent Decree in its present form. However, all parties, including the State, accepted language in a motion filed with the U.S. District Court for the Eastern District of Missouri (the “**Court**”) in August 2011, which indicated that there were no issues remaining to be resolved in the proceedings. On August 4, 2011, the Consent Decree was lodged with the Court. An extended public comment period ended October 10, 2011. On April 27, 2012, the Court entered the Consent Decree, thus concluding the litigation of this lawsuit. On that same day the Court entered a Memorandum and Order which realigned the State as a defendant and reaffirmed a 2009 decision by the Eighth Circuit Court of Appeals that the State had waived its sovereign immunity. Although this litigation matter has concluded, the District is working diligently to implement the Consent Decree on schedule.

### **RISK FACTORS**

*The following is a discussion of certain risks and other considerations that should be considered in conjunction with all other information contained in this Official Statement, including the Appendices hereto, by prospective investors in evaluating the Series 2017A Bonds. Such discussion is not, and is not intended to be, exhaustive and should not be considered as a comprehensive or exhaustive discussion of risks or other considerations which may be relevant to an investment in the Series 2017A Bonds. In addition, the order in which the following information is presented is not intended to reflect the relative importance of any such considerations. There can be no assurance that other risk factors not discussed herein will not become material in the future.*

## Factors Affecting the District

One or more of the following factors or events, or the occurrence of other unanticipated factors or events, could adversely affect the District's operations and financial performance to an extent indeterminable at this time.

Changes in Management or Policies. Changes in key management personnel or policies of the District could adversely affect the financial performance of the District.

Future Economic Conditions. Increased unemployment or other adverse economic conditions or changes in the demographics of the District; an inability to control expenses in periods of inflation and difficulties in increasing charges could adversely affect the District's financial performance. For more information on the District's rate setting process see **"MANAGEMENT'S DISCUSSION AND ANALYSIS OVERVIEW – Rate Commission and Rate Setting Process."**

Insurance Claims. Increases in the cost of the District's insurance coverages and the amounts paid in settlement of claims not covered by insurance could adversely affect the financial performance of the District.

Organized Labor Efforts. Certain employees of the District's Operations Department are represented by collective bargaining units. Labor disputes with these collective bargaining units could result in adverse labor actions or increased labor costs.

Environmental Regulation. Sewer utilities are subject to continuing environmental regulation. Federal, state and local standards and procedures that regulate the environmental impact of water or sewer utilities are subject to change. These changes may arise from continuing legislative, regulatory and judicial action regarding such standards and procedures. Consequently, there is no assurance that facilities in operation will remain subject to the regulations currently in effect, will always be in compliance with further regulations or will always be able to obtain all required operating permits. An inability to comply with environmental standards could result in reduced operating levels and fines. Legislative, regulatory, administrative or enforcement actions involving environmental controls could also adversely affect the operation of the System. For example, if property of the District is determined to be contaminated by hazardous materials, the District could be liable for significant clean-up costs even if it were not responsible for the contamination.

Natural Disasters. The occurrence of natural disasters, such as tornados, earthquakes, floods or droughts, could damage the facilities of the District, interrupt services or otherwise impair operations and the ability of the District to produce revenues.

Terrorist Attacks. Although potential terrorist attacks could temporarily disrupt wastewater treatment service, the District has taken and continues to take precautions to minimize this risk, but does not represent that any existing or additional safety or security measures will be adequate in the event that terrorist activities are directed at the System.

Miscellaneous Factors. The sewer industry in general has experienced, or may in the future experience, problems including (a) the effects of inflation on the costs of operation of facilities, (b) increased financing requirements coupled with the increased cost and uncertain availability of capital, and (c) compliance with rapidly changing environmental, safety and licensing regulations and requirements.



## **Summary Financial Information**

Certain summarized historical financial information and certain projected revenues and expenditures of the District are summarized in this Official Statement and its appendices. There can be no assurance that the financial results achieved by the District in the future will be similar to historical results or the projections contained herein. Such future results will vary from historical results, and actual variations may be material. Information as to the projected figures and the assumptions upon which they are based are contained in this Official Statement and its appendices. No assurance can be given that assumptions used in preparing projected revenues are accurate including, but not limited to, those as to water usage volume, operating and maintenance expenses, and the stability of the customer base. Significant variations in such assumptions may affect the actual operating and financial results. Therefore, the historical operating results of the District's System contained in this Official Statement cannot be viewed as a representation that the District will be able to generate sufficient revenues in the future to make timely payment of principal of, redemption premium, if any, and interest on the Series 2017A Bonds.

## **Certain Bankruptcy Risks**

The remedies available to the owners of the Series 2017A Bonds upon an event of default under the Bond Ordinance are in many respects dependent upon judicial actions that are often subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, including specifically the United States Bankruptcy Code, 11 U.S.C. §§ 101, et seq. the remedies provided in the Bond Ordinance may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the delivery of the Series 2017A Bonds will be qualified as to the enforceability of the various legal instruments by limitations imposed by general principles of equity and by bankruptcy, reorganization, insolvency or other similar laws, affecting the rights of creditors generally.

## **Secondary Markets and Prices**

The Underwriters will not be obligated to repurchase any of the Series 2017A Bonds and no representation is made concerning the existence of any secondary market for the Series 2017A Bonds. No assurance can be given that any secondary market will develop following the completion of the offering of the Series 2017A Bonds, and no assurance can be given that the initial offering prices for the Series 2017A Bonds will continue for any time period.

## **Risk of Taxability**

For information with respect to events occurring subsequent to issuance of the Series 2017A Bonds that may require that interest on such Series 2017A Bonds be included in gross income for purposes of federal income taxation, see the caption "**TAX MATTERS**" in this Official Statement.

## **Risk of Audit**

The Internal Revenue Service (the "**Service**") has established an ongoing program to audit tax-exempt obligations to determine whether interest on such obligations should be included in gross income for federal income tax purposes. Owners of the Series 2017A Bonds are advised that, if the Service does audit such Series 2017A Bonds, under current Service procedures, at least during the early stages of an audit, the Service will treat the District as the taxpayer, and the owners of such Series 2017A Bonds may have limited rights to participate in the audit. Public awareness of any audit could adversely affect the market value and liquidity of Series 2017A Bonds during the pendency of the audit, regardless of the ultimate outcome thereof.

## **Limited Obligations**

The Series 2017A Bonds are limited obligations of the District, payable solely from the Pledged Revenues generated from the operation of the System. The Series 2017A Bonds and the interest thereon shall not constitute a general or moral obligation of the District nor a debt, indebtedness, or obligation of, or a pledge of the faith and credit of, the District, the State or any political subdivision thereof, within the meaning of any constitutional, statutory or charter provision whatsoever. The taxing power of the District, the State or any political subdivision is not pledged to the payment of the Series 2017A Bonds or the interest thereon. The District has no authority to levy any taxes to pay the Series 2017A Bonds.

## **Loss of Premium Upon Early Redemption**

Purchasers of the Series 2017A Bonds at a price in excess of their principal amount should consider the fact that the Series 2017A Bonds are subject to redemption at a redemption price equal to their principal amount plus accrued interest under certain circumstances. See **“THE SERIES 2017A BONDS – Redemption Provisions.”**

## **LITIGATION**

Except as described in the **“REGULATORY REQUIREMENTS – Regulatory Matters – Consent Decree”** above, as of the date hereof, to the knowledge of the District there is no legal action, suit, proceeding, inquiry or investigation at law or in equity before or by any court, public board or body for which the District has been served with process or official notice or threatened against or affecting the District or any reasonable basis therefor, wherein an unfavorable decision, ruling or finding would adversely affect the transaction contemplated by this Official Statement or the validity of the Series 2017A Bonds, the Bond Ordinance, or any agreement or instrument to which the District is a party and which is used or contemplated for use in the transactions contemplated by this Official Statement, and no member, employee or agent of the District has been served with any legal process regarding such litigation or other proceeding.

## **TAX MATTERS**

The following is a summary of the material federal and Missouri income tax consequences of holding and disposing of the Series 2017A Bonds. This summary is based upon laws, regulations, rulings and judicial decisions now in effect, all of which are subject to change (possibly on a retroactive basis). This summary does not discuss all aspects of federal income taxation that may be relevant to investors in light of their personal investment circumstances or describe the tax consequences to certain types of owners subject to special treatment under the federal income tax laws (for example, dealers in securities or other persons who do not hold the Series 2017A Bonds as a capital asset, tax-exempt organizations, individual retirement accounts and other tax deferred accounts, and foreign taxpayers), and, except for the income tax laws of Missouri, does not discuss the consequences to an owner under any state, local or foreign tax laws. The summary does not deal with the tax treatment of persons who purchase the Series 2017A Bonds in the secondary market. Prospective investors are advised to consult their own tax advisors regarding federal, state, local and other tax considerations of holding and disposing of the Series 2017A Bonds.

## **Opinion of Co-Bond Counsel**

In the opinion of Gilmore & Bell, P.C. and White Coleman & Associates, LLC, Co-Bond Counsel to the District, under the law existing as of the issue date of the Series 2017A Bonds:

Federal and Missouri Tax Exemption. The interest on the Series 2017A Bonds is excludable from gross income for federal income tax purposes and is exempt from income taxation by Missouri.

Alternative Minimum Tax. Interest on the Series 2017A Bonds is not an item of tax preference for purposes of computing the federal alternative minimum tax imposed on individuals and corporations, but is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on certain corporations.

Bank Qualification. The Series 2017A Bonds have not been designated as “qualified tax-exempt obligations” for purposes of Section 265(b)(3) of the Code.

Co-Bond Counsel’s opinions are provided as of the date of the original issue of the Series 2017A Bonds, subject to the condition that the District comply with all requirements of the Code that must be satisfied subsequent to the issuance of the Series 2017A Bonds in order that interest thereon be, or continue to be, excludable from gross income for federal income tax purposes. The District has covenanted to comply with all such requirements. Failure to comply with certain of such requirements may cause the inclusion of interest on the Series 2017A Bonds in gross income for federal and Missouri income tax purposes retroactive to the date of issuance of the Series 2017A Bonds. Co-Bond Counsel is expressing no opinion regarding other federal, state or local tax consequences arising with respect to the Series 2017A Bonds but has reviewed the discussion under the heading “**TAX MATTERS.**”

## **Other Tax Consequences**

Original Issue Premium. For federal income tax purposes, premium is the excess of the issue price of a Series 2017A Bond over its stated redemption price at maturity. The issue price of a Series 2017A Bond is generally the first price at which a substantial amount of the Series 2017A Bonds of that maturity have been sold to the public. Under Section 171 of the Code, premium on tax-exempt bonds amortizes over the term of the Series 2017A Bond using constant yield principles, based on the purchaser’s yield to maturity. As premium is amortized, the owner’s basis in the Series 2017A Bond and the amount of tax-exempt interest received will be reduced by the amount of amortizable premium properly allocable to the owner, which will result in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes on sale or disposition of the Series 2017A Bond prior to its maturity. Even though the owner’s basis is reduced, no federal income tax deduction is allowed. Prospective investors should consult their own tax advisors concerning the calculation and accrual of bond premium.

Sale, Exchange or Retirement of Series 2017A Bonds. Upon the sale, exchange or retirement of a Series 2017A Bond, an owner of the Series 2017A Bond generally will recognize gain or loss in an amount equal to the difference between the amount of cash and the fair market value of any property received on the sale, exchange or retirement of the Series 2017A Bond (other than in respect of accrued and unpaid interest) and such owner’s adjusted tax basis in the Series 2017A Bond. To the extent a Series 2017A Bond is held as a capital asset, such gain or loss will be capital gain or loss and will be long-term capital gain or loss if the Series 2017A Bond has been held for more than 12 months at the time of sale, exchange or retirement.

Reporting Requirements. In general, information reporting requirements will apply to certain payments of principal, interest and premium paid on the Series 2017A Bonds, and to the proceeds paid on the sale of the Series 2017A Bonds, other than certain exempt recipients (such as corporations and foreign entities). A backup withholding tax will apply to such payments if the owner fails to provide a taxpayer identification number or certification of foreign or other exempt status or fails to report in full dividend

and interest income. The amount of any backup withholding from a payment to an owner will be allowed as a credit against the owner's federal income tax liability.

Collateral Federal Income Tax Consequences. Prospective purchasers of the Series 2017A Bonds should be aware that ownership of the Series 2017A Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, certain S corporations with "excess net passive income," foreign corporations subject to the branch profits tax, life insurance companies, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry or have paid or incurred certain expenses allocable to the Series 2017A Bonds. Co-Bond Counsel expresses no opinion regarding these tax consequences. Purchasers of Series 2017A Bonds should consult their tax advisors as to the applicability of these tax consequences and other federal income tax consequences of the purchase, ownership and disposition of the Series 2017A Bonds, including the possible application of state, local, foreign and other tax laws.

## LEGAL MATTERS

Certain legal matters incident to the authorization, issuance, sale and delivery of the Series 2017A Bonds are subject to the approval of Gilmore & Bell, P.C., St. Louis, Missouri, and White Coleman & Associates, LLC, St. Louis, Missouri, Co-Bond Counsel, whose approving legal opinions will be delivered with the Series 2017A Bonds in substantially the form of **Appendix E** hereto. Certain other legal matters will be passed on for the District by its General Counsel and by its Disclosure Counsel, Armstrong Teasdale LLP, St. Louis, Missouri. Certain legal matters will be passed upon for the Underwriters by their co-counsel, Thompson Coburn LLP, St. Louis, Missouri, and Richard G. Hughes & Associates, LLC, St. Louis, Missouri.

The various legal opinions to be delivered concurrently with the delivery of the Series 2017A Bonds express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. By rendering a legal opinion, the opinion giver does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of parties to such transaction, nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

## RATINGS

Moody's Investors Service, Inc., S&P Global Ratings, a Standard & Poor's Financial Services LLC business, and Fitch Ratings, Inc. (collectively, the "**Rating Agencies**") have assigned the Series 2017A Bonds the ratings of "Aa1", "AAA" and "AA+," respectively, based on each Rating Agency's evaluation of the creditworthiness of the District. Such ratings reflect only the views of the Rating Agencies at the time such ratings are given, and the Underwriters, Co-Municipal Advisors and the District make no representation as to the appropriateness of such ratings. An explanation of the significance of such ratings may be obtained only from the Rating Agencies.

The District has furnished the Rating Agencies with certain information and materials relating to the Series 2017A Bonds and the District that have not been included in this Official Statement. Generally, rating agencies base their ratings on the information and materials so furnished and on investigations, studies and assumptions by the rating agencies. There is no assurance that a particular rating will be maintained for any given period of time or that it will not be lowered or withdrawn entirely if, in the judgment of the agency originally establishing such rating, circumstances so warrant. Neither the District, nor the Co-Municipal Advisors nor the Underwriters have undertaken any responsibility to bring to the attention of the holders of the Series 2017A Bonds any proposed revision or withdrawal of a rating of the

Series 2017A Bonds or to oppose any such proposed revision or withdrawal. Any revision or withdrawal of a rating could have an adverse effect on the market price and marketability of the Series 2017A Bonds.

### CONTINUING DISCLOSURE

Pursuant to the Continuing Disclosure Agreement, under which the District has designated DAC as Disclosure Dissemination Agent, the District has covenanted for the benefit of the holders and beneficial owners of the Series 2017A Bonds to provide, or cause to be provided, certain financial information and operating data relating to the District to certain parties by not later than 180 days following the end of the District's Fiscal Year (the "**Annual Report**"), commencing with the report for the Fiscal Year ending June 30, 2018, and to provide notices of the occurrence of certain enumerated events, if material. The Annual Report and any notices of material events will be submitted by the Disclosure Dissemination Agent on behalf of the District with the Municipal Securities Rulemaking Board ("**MSRB**") through its Electronic Municipal Market Access system ("**EMMA**") pursuant to Rule 15c2-12. EMMA is an internet-based, online portal for free investor access to municipal bond information, including offering documents, material event notices, real-time municipal securities trade prices and education resources available at [www.emma.msrb.org](http://www.emma.msrb.org). Nothing contained on EMMA relating to the District or the Series 2017A Bonds is incorporated by reference in this Official Statement. These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12. The specific nature of the information to be contained in the Annual Report and in the notices of material events is summarized in "**DEFINITIONS AND SUMMARIES OF CERTAIN PROVISIONS OF THE BOND ORDINANCE AND THE CONTINUING DISCLOSURE AGREEMENT**" in **Appendix C** hereto.

During the previous five years, the District believes it has materially complied with its continuing disclosure undertakings to provide financial and operating information required by Rule 15c2-12.

The Disclosure Dissemination Agent has only the duties specifically set forth in the Continuing Disclosure Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described in the Continuing Disclosure Agreement is limited to the extent that the District has provided such information to the Disclosure Dissemination Agent as required by the Continuing Disclosure Agreement. The Disclosure Dissemination Agent has no duty with respect to the content of any disclosures or notice made pursuant to the terms of the Continuing Disclosure Agreement. The Disclosure Dissemination Agent has no duty or obligation to review or verify any information in the Annual Report, the District's audited financial statements, a Notice Event (as defined in the Continuing Disclosure Agreement), or any other information, disclosures or notices provided to it by the District and shall not be deemed to be acting in any fiduciary capacity for the District, the holders of the Series 2017A Bonds or any other party. The Disclosure Dissemination Agent has no responsibility for the District's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the District has complied with the Continuing Disclosure Agreement. The Disclosure Dissemination Agent may conclusively rely upon certifications of the District at all times.

### UNDERWRITING

The Series 2017A Bonds are being purchased for reoffering by the group of underwriters shown on the cover page hereof (collectively, the "**Underwriters**"), pursuant to a purchase contract between the District and the Underwriters (the "**Purchase Contract**"). The Purchase Contract provides that the Underwriters shall purchase all, but not less than all, of the Series 2017A Bonds at the aggregate purchase price of \$378,750,485.96, which amount is equal to the principal amount of the Series 2017A Bonds of

\$316,175,000.00, less underwriters' discount of \$1,215,947.84, plus original issue premium of \$63,791,433.80.

Siebert Cisneros Shank & Co., L.L.C. ("SCS") has entered into an agreement with Muriel Siebert & Co. for the retail distribution of certain securities offerings, at the original issue prices. Pursuant to said agreement, if applicable to the Series 2017A Bonds, Muriel Siebert & Co. will purchase the Series 2017A Bonds at the original issue price less the selling concession with respect to any Series 2017A Bonds that Muriel Siebert & Co. sells. SCS will share a portion of its underwriting compensation with Muriel Siebert & Co., if applicable.

"US Bancorp" is the marketing name of U.S. Bancorp and its subsidiaries, including U.S. Bancorp Investments, Inc. ("USBII"), which is serving as an Underwriter of the Series 2017A Bonds.

The Underwriters may offer and sell the Series 2017A Bonds to certain dealers (including dealers depositing the Series 2017A Bonds into investment trusts) and others at prices lower than the public offering price stated on the inside cover page hereof. The initial public offering price may be changed from time to time by the Underwriters.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principle investment, hedging, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the District and to persons and entities with relationships with the District, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the District (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the District. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

### **CERTAIN RELATIONSHIPS**

White Coleman & Associates, LLC has represented certain of the Underwriters in transactions unrelated to the issuance of the Series 2017A Bonds, but is not representing any of the Underwriters in connection with the issuance of the Series 2017A Bonds.

Armstrong Teasdale LLP and Thompson Coburn LLP each represent the District in certain matters unrelated to the issuance of the Series 2017A Bonds.

### **FINANCIAL FEASIBILITY CONSULTANT**

The District has retained Raftelis Financial Consultants, Inc., to serve as the Financial Feasibility Consultant to the District in connection with the issuance of the Series 2017A Bonds. See **Appendix D –**

**“Report on the Financial Feasibility of The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A”.**

**VERIFICATION OF MATHEMATICAL CALCULATIONS**

The accuracy of the mathematical computations (i) of the adequacy of the maturing principal amounts of the United States of America Government Obligations, together with the interest income thereon and uninvested cash, if any, to pay when due the principal of and redemption premium, if any, and interest on the Refunded Bonds; and (ii) relating to the yields related to (a) the United States of America Government Obligations, and (b) the Series 2017A Bonds, will be verified by Robert Thomas CPA, LLC, Leawood, Kansas. Such verification of arithmetical accuracy and mathematical computations shall be based upon information and assumptions supplied by the Municipal Advisors and on interpretations of the Code, provided by Co-Bond Counsel.

**MUNICIPAL ADVISORS**

PFM Financial Advisors LLC, Cleveland, Ohio, and Independent Public Advisors, LLC, Kansas City, Missouri, have served as Co-Municipal Advisors to the District in connection with the Series 2017A Bonds, relative to a plan of financing and assisting the District in drafting certain portions of this Official Statement for the sale of the Series 2017A Bonds. The Co-Municipal Advisors have participated in the compilation and editing of this Official Statement. The Co-Municipal Advisors have not, however, independently verified the factual information contained in this Official Statement nor have they conducted an investigation of the affairs of the District for the purpose of determining the accuracy or completeness of any of the information contained herein. The Co-Municipal Advisors have relied on the diligence and accuracy of the District which has certified that this Official Statement contains no material misstatement or omission of information.

**INDEPENDENT AUDITORS**

The Independent Auditors Report, Management’s Discussion and Analysis and Basic Financial Statements of the District for the Fiscal Year ended June 30, 2017 included in **Appendix A** of this Official Statement has been audited by CliftonLarsonAllen LLP, and also includes audited financial statements of the District for the Fiscal Year ended June 30, 2016 that were audited by other auditors.

**MISCELLANEOUS**

The references, excerpts and summaries of all documents referred to herein do not purport to be complete statements of the provisions of such documents, and reference is made to all such documents for full and complete statements of all matters of fact relating to the Series 2017A Bonds, the security for the payment of the Series 2017A Bonds and the rights of the owners thereof. During the period of the offering, copies of drafts of such documents may be examined at the offices of the Co-Municipal Advisors; following delivery of the Series 2017A Bonds, copies of such documents may be examined at the corporate trust office of the Paying Agent in St. Louis, Missouri. The information contained in this Official Statement has been compiled from official and other sources deemed to be reliable, and while not guaranteed as to completeness or accuracy, is believed to be correct as of this date.

It is anticipated that CUSIP identification numbers will be printed on the Series 2017A Bonds, but neither the failure to print such numbers on any Series 2017A Bonds nor any error in printing of such numbers will constitute cause for a failure or refusal by the purchaser thereof to accept delivery of and pay for any Series 2017A Bonds.

The attached appendices are integral parts of this Official Statement and must be read together with all of the foregoing statements.

The closing documents will include a certificate by the proper official of the District that, to the best of his knowledge and belief at the time of the acceptance of the delivery of the Series 2017A Bonds, this Official Statement and any information furnished by the District supplementary thereto did not and do not contain any untrue statement of material fact or omit to state a material fact necessary in order to make the statements made in light of the circumstances under which they were made, not misleading in any material respect.

Any statement made in this Official Statement involving matters of opinion or of estimates, whether or not expressly so stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the information presented herein since the date hereof. This Official Statement is not to be construed as a contract or agreement between the District, the Paying Agent, or the Underwriters and the purchasers or Owners of any Series 2017A Bonds.

This Official Statement has been authorized and approved by the District. For purposes of compliance with Rule 15c2-12, this Official Statement constitutes an official statement of the District that has been deemed final by the District as of its date except for the omission of no more than the information permitted by Rule 15c2-12. The Official Statement has been duly executed and delivered on its behalf by the officials signing below.

By: /s/ Brian L. Hoelscher, P.E.  
Executive Director

By: /s/ Tim R. Snoke  
Secretary-Treasurer



## **APPENDIX A**

**Independent Auditors' Report, Management's Discussion and Analysis  
and Basic Financial Statements of The Metropolitan St. Louis Sewer District  
for the Fiscal Year ended June 30, 2017 and 2016**

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**THE METROPOLITAN  
ST. LOUIS  
SEWER  
DISTRICT**

*Maline Creek  
Storage Facility  
Construction*



ST. LOUIS, MISSOURI

---

**COMPREHENSIVE ANNUAL  
FINANCIAL REPORT**  
FISCAL YEARS ENDED JUNE 30, 2017 and 2016

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***THE METROPOLITAN ST. LOUIS  
SEWER DISTRICT  
ST. LOUIS, MISSOURI  
COMPREHENSIVE ANNUAL  
FINANCIAL REPORT  
FOR THE FISCAL YEARS ENDED JUNE 30, 2017 AND 2016***

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Report Prepared And Submitted By The  
Department of Finance

Marion M. Gee  
Director Of Finance

## Contents

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	Page
<b>Part I – Introductory Section:</b>	
Letter Of Transmittal .....	i
Organization Chart .....	xii
Certificate Of Achievement For Excellence In Financial Reporting.....	xiii
<b>Part II – Financial Section:</b>	
Independent Auditors’ Report .....	1
Management’s Discussion And Analysis .....	3
<b>Basic Financial Statements</b>	
Statements Of Net Position .....	16
Statements Of Revenues, Expenses, And Changes In Net Position .....	18
Statements Of Cash Flows .....	19
Notes To Financial Statements .....	21
<b>Required Supplementary Information</b>	
Schedule Of Changes In Net Pension Liability And Related Ratios .....	87
Schedule Of Employer Contributions – Employees’ Pension Plan .....	88
Schedule Of Funding Progress – Other Post-Employment Benefit Plan .....	88
<b>Part III – Statistical Section:</b>	
Net Position By Component.....	89
Changes In Net Position .....	90
Operating Revenues By Source .....	91
Operating Expenses .....	92
Non-Operating Revenues And Expenses .....	93
User Charge Rates .....	94
User Charge Revenues.....	95
Sewer User Charges (Composite-Annual) .....	96
Number Of Customers By Type .....	97
Ten Largest Customers.....	98
Ratios of Outstanding Debt By Type .....	99
Computation Of Overlapping Debt .....	100
Pledged Revenue Coverage.....	101
Demographic And Economic Statistics .....	102
Principal Employers (St. Louis Metropolitan Area).....	103
Employment Level.....	104
Average Flow .....	105
Operating And Capital Indicators.....	106

# Introductory Section

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## 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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2350 Market Street  
St. Louis, MO 63103-2555  
Phone: 314,768,6200  
[www.stlmsd.com](http://www.stlmsd.com)

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:

	<u>2017</u>	<u>2016</u>
<u>Sewer Plan Reviews:</u>		
Number of Plans Approved	523	613
Number of Miles of Sewers	34	38
<u>Sewer Construction Permits:</u>		
Number of Permits Issued	3,740	4,546
Number of Miles of Sewers	24	30
<u>Customer Connections:</u>		
Number of Connection Permits Issued	1,891	2,165
Connection Fee Revenue (in millions)	\$2.0	\$1.7
<u>Value of Sewers Dedicated to</u>		
<u>MSD by Developers</u> (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 15<sup>th</sup> 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.

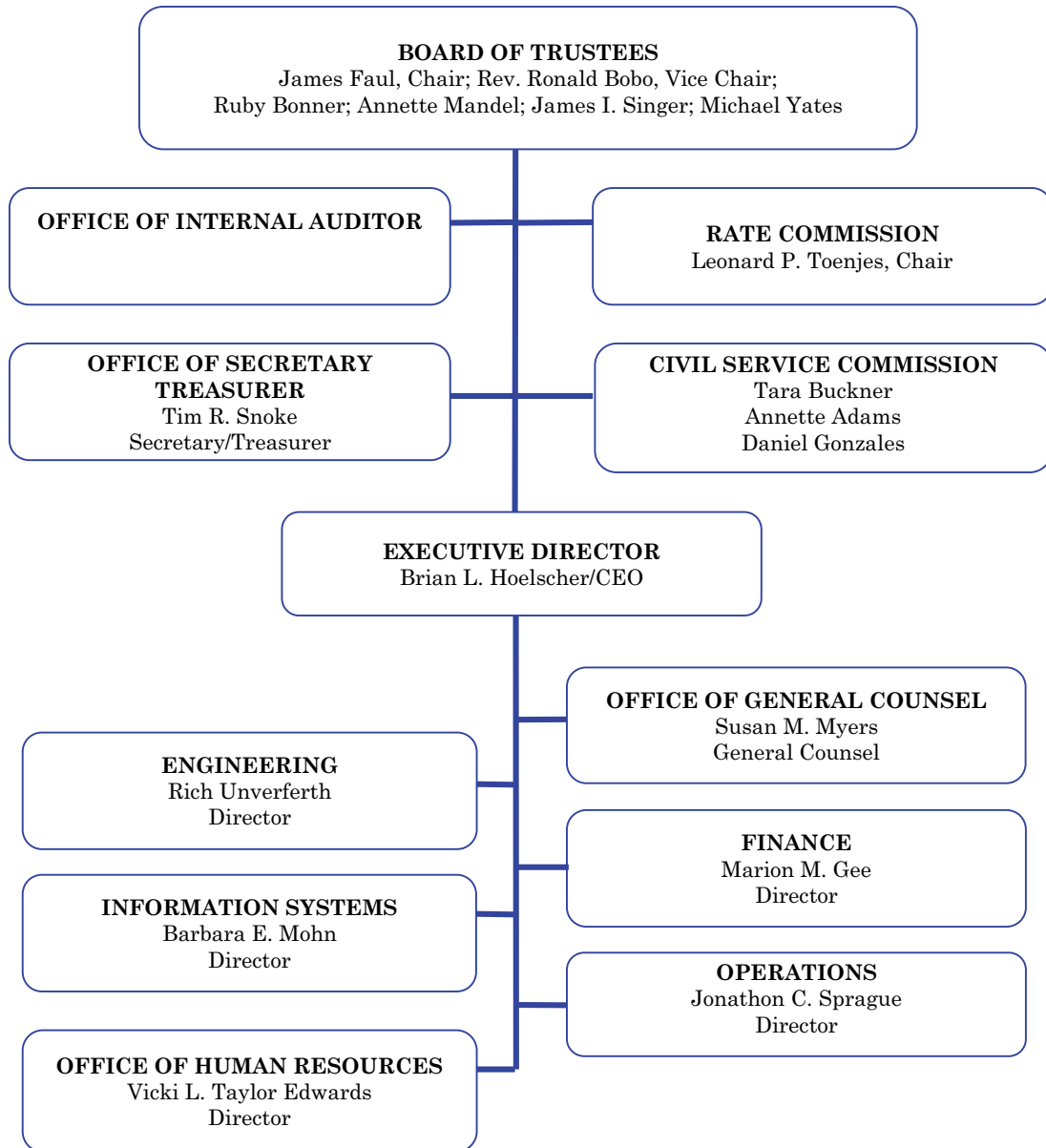
To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, the contents of which conform to program standards. The CAFR must satisfy both U.S. generally accepted accounting principles and applicable legal requirements. A Certificate 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  
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

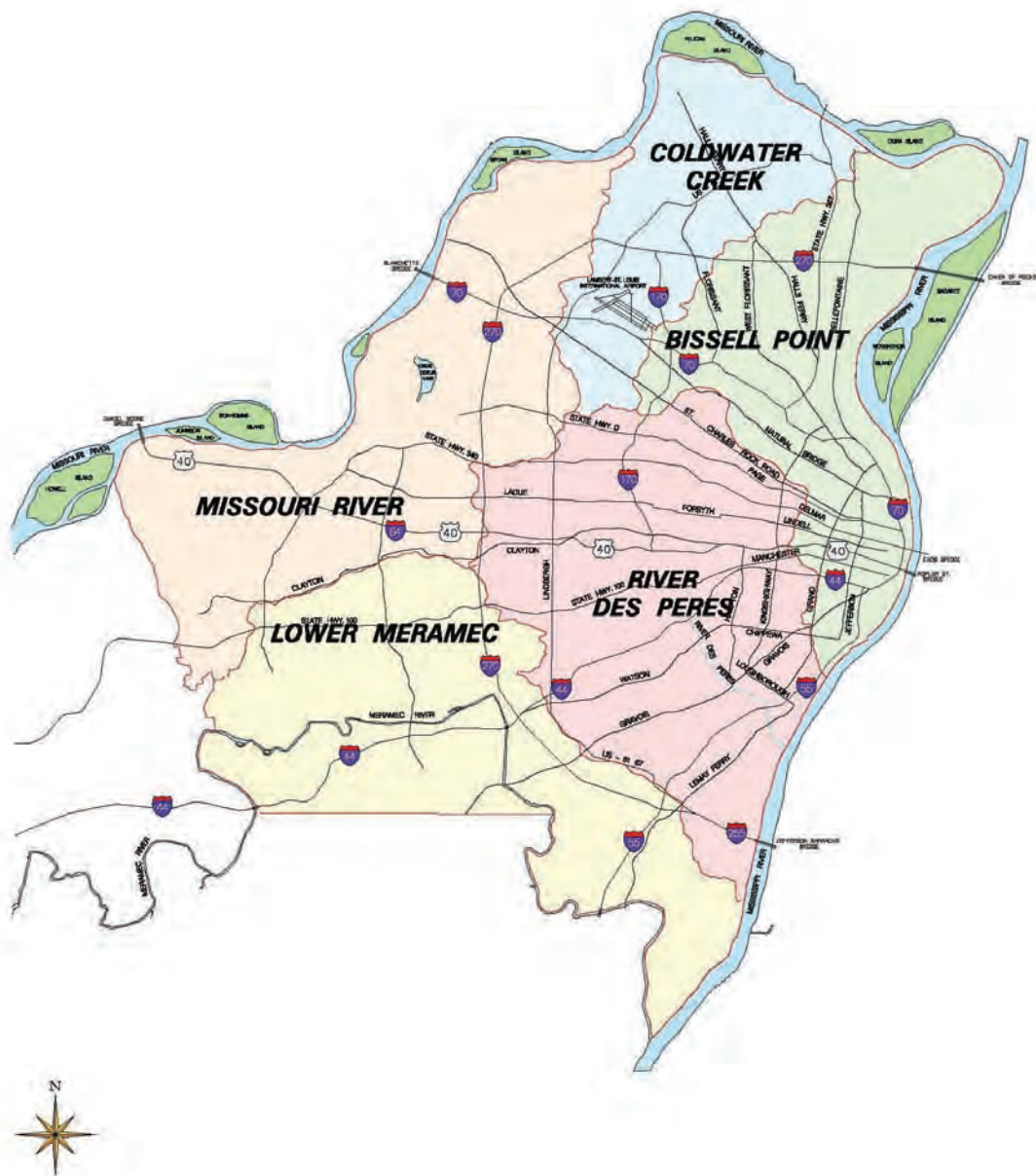
**June 30, 2016**

Executive Directors/CEO

# Financial Section

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## 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.

## **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.

A handwritten signature in black ink that reads "CliftonLarsonAllen LLP". The signature is written in a cursive, flowing style.

**CliftonLarsonAllen LLP**

St Louis, Missouri  
October 17, 2017

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## 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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## Management's Discussion And Analysis (*Continued*)

### 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 METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Management's Discussion And Analysis (*Continued*)**

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Management's Discussion And Analysis (Continued)

### 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
<b>Assets:</b>					
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
<b>Total Assets</b>	<b>3,995,810</b>	<b>3,759,076</b>	<b>236,734</b>	<b>3,519,815</b>	<b>239,261</b>
<b>Deferred Outflow of Resources:</b>					
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
<b>Total Deferred Outflow of Resources</b>	<b>48,987</b>	<b>43,118</b>	<b>5,869</b>	<b>28,809</b>	<b>14,309</b>
<b>Liabilities:</b>					
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
<b>Total Liabilities</b>	<b>1,649,024</b>	<b>1,469,425</b>	<b>179,599</b>	<b>1,267,598</b>	<b>201,827</b>
<b>Deferred Inflow of Resources:</b>					
Pension-related Inflows	4,605	5,712	(1,107)	2,910	2,802
<b>Total Deferred Inflow of Resources</b>	<b>4,605</b>	<b>5,712</b>	<b>(1,107)</b>	<b>2,910</b>	<b>2,802</b>
<b>Net Position:</b>					
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
<b>Total Net Position</b>	<b>\$ 2,391,168</b>	<b>\$ 2,327,057</b>	<b>\$ 64,111</b>	<b>\$ 2,278,116</b>	<b>\$ 48,941</b>

### 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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Management's Discussion And Analysis (*Continued*)

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Management's Discussion And Analysis *(Continued)*

### 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
<b>Operating Revenues:</b>					
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
<b>Total Operating Revenues</b>	<b>333,491</b>	<b>319,858</b>	<b>13,633</b>	<b>290,388</b>	<b>29,470</b>
<b>Non-operating Revenues:</b>					
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
<b>Total Non-operating Revenues</b>	<b>35,467</b>	<b>30,410</b>	<b>5,057</b>	<b>27,802</b>	<b>2,608</b>
<b>Total Revenues</b>	<b>368,958</b>	<b>350,268</b>	<b>18,690</b>	<b>318,190</b>	<b>32,078</b>
<b>Operating Expenses:</b>					
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)
<b>Total Operating Expenses</b>	<b>275,078</b>	<b>273,096</b>	<b>1,982</b>	<b>256,522</b>	<b>16,574</b>
<b>Non-operating Expenses:</b>					
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
<b>Total Non-operating Expenses</b>	<b>39,383</b>	<b>40,268</b>	<b>(885)</b>	<b>40,877</b>	<b>(609)</b>
<b>Total Expenses</b>	<b>314,461</b>	<b>313,364</b>	<b>1,097</b>	<b>297,399</b>	<b>15,965</b>
<b>Income Before Capital Grants And Contributions</b>	<b>54,497</b>	<b>36,904</b>	<b>17,593</b>	<b>20,791</b>	<b>16,113</b>
Capital Grants And Contributions	9,614	12,037	(2,423)	12,997	(960)
<b>Change in Net Position</b>	<b>64,111</b>	<b>48,941</b>	<b>15,170</b>	<b>33,788</b>	<b>15,153</b>
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
<b>Net Position - End of Year</b>	<b>\$ 2,391,168</b>	<b>\$ 2,327,057</b>	<b>\$ 64,111</b>	<b>\$ 2,278,116</b>	<b>\$ 48,941</b>

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Management's Discussion And Analysis (*Continued*)

#### **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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Management's Discussion And Analysis *(Continued)*

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
<b>Cash And Cash Equivalents At End Of Year</b>	<b>\$ 48,113</b>	<b>\$ 49,196</b>	<b>\$ (1,083)</b>	<b>\$ 61,807</b>	<b>\$ (12,611)</b>

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Management's Discussion And Analysis (*Continued*)**

#### **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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Management's Discussion And Analysis *(Continued)*

### 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)
<b>Total</b>	<b>\$ 3,252,238</b>	<b>\$ 3,052,043</b>	<b>\$ 200,195</b>	<b>\$ 2,891,569</b>	<b>\$ 160,474</b>

### 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.



## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Management's Discussion And Analysis *(Continued)*

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
<b>Senior Revenue Bonds:</b>					
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	—	—
<b>Subordinate Revenue Bonds:</b>					
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)
<b>Missouri DNR:</b>					
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)
<b>Total</b>	<b>\$ 1,351,437</b>	<b>\$ 1,203,366</b>	<b>\$ 148,071</b>	<b>\$ 1,056,510</b>	<b>\$ 146,856</b>

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Management's Discussion And Analysis (*Continued*)**

#### **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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Management's Discussion And Analysis (*Continued*)

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:

Marion M. Gee, Director of Finance  
The Metropolitan St. Louis Sewer District  
2350 Market Street  
St. Louis, MO 63103-2555  
314-768-6200  
[mgee@stlmsd.com](mailto:mgee@stlmsd.com)

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## STATEMENTS OF NET POSITION

Assets	June 30,	
	2017	2016
<b>Current Assets</b>		
<b>Unrestricted Current Assets</b>		
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
<b>Total Unrestricted Current Assets</b>	<b>397,769,352</b>	<b>287,180,328</b>
<b>Restricted Current Assets</b>		
Cash and cash equivalents	2,171,935	2,065,003
Investments	29,674,144	13,393,010
<b>Total Restricted Current Assets</b>	<b>31,846,079</b>	<b>15,458,013</b>
<b>Total Current Assets</b>	<b>429,615,431</b>	<b>302,638,341</b>
<b>Non-Current Assets</b>		
<b>Restricted Assets</b>		
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	—
<b>Total Restricted Non-Current Assets</b>	<b>236,414,702</b>	<b>224,911,550</b>
<b>Other Assets</b>		
Notes receivable	12,425,336	12,999,370
Long-term investments	65,116,013	166,483,086
<b>Total Other Assets</b>	<b>77,541,349</b>	<b>179,482,456</b>
<b>Capital Assets</b>		
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
	<b>3,849,646,929</b>	<b>3,752,034,026</b>
Less: Accumulated depreciation	1,375,842,413	1,300,427,525
Net depreciable assets	<b>2,473,804,516</b>	<b>2,451,606,501</b>
Non-depreciable:		
Land	70,695,016	69,702,470
Construction in progress	707,738,709	530,734,241
<b>Net Capital Assets</b>	<b>3,252,238,241</b>	<b>3,052,043,212</b>
<b>Total Non-Current Assets</b>	<b>3,566,194,292</b>	<b>3,456,437,218</b>
<b>Total Assets</b>	<b>3,995,809,723</b>	<b>3,759,075,559</b>
<b>Deferred Outflows of Resources</b>		
Bonds and notes payable-Deferred loss on refunding	11,320,670	11,973,700
Pension-related outflows	37,665,786	31,144,263
<b>Total Deferred Outflows of Resources</b>	<b>48,986,456</b>	<b>43,117,963</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## STATEMENTS OF NET POSITION *(Continued)*

	June 30,	
	2017	2016
<b>Liabilities</b>		
<b>Current Liabilities-Payable From Unrestricted Assets</b>		
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
<b>Total Current Liabilities-Payable From Unrestricted Assets</b>	131,666,994	123,558,883
<b>Current Liabilities-Payable From Restricted Assets</b>		
Contracts and accounts payable	1,264,997	1,286,539
Retainage payable	746,642	438,547
<b>Total Current Liabilities-Payable From Restricted Assets</b>	2,011,639	1,725,086
<b>Total Current Liabilities</b>	133,678,633	125,283,969
<b>Non-Current Liabilities</b>		
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
<b>Total Non-Current Liabilities</b>	1,515,344,974	1,344,140,572
<b>Total Liabilities</b>	1,649,023,607	1,469,424,541
<b>Deferred Inflow of Resources</b>		
Pension-related inflows	4,604,518	5,711,868
<b>Total Deferred Inflow of Resources</b>	4,604,518	5,711,868
<b>Net Position</b>		
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
<b>Total Net Position</b>	\$ 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
<b>Operating Revenues</b>		
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
<b>Total Operating Revenues</b>	<b>333,490,989</b>	<b>319,857,731</b>
<b>Operating Expenses</b>		
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
<b>Total Operating Expenses</b>	<b>275,077,675</b>	<b>273,095,705</b>
<b>Operating Income</b>	<b>58,413,314</b>	<b>46,762,026</b>
<b>Non-Operating Revenues</b>		
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
<b>Total Non-Operating Revenues</b>	<b>35,467,240</b>	<b>30,409,789</b>
<b>Non-Operating Expenses</b>		
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
<b>Total Non-Operating Expenses</b>	<b>39,383,359</b>	<b>40,268,116</b>
<b>Income Before Capital Grants And Contributions</b>	<b>54,497,195</b>	<b>36,903,699</b>
<b>Capital Grants And Contributions</b>		
Utility plant contributed	6,807,147	11,271,085
Grant revenue	2,806,599	765,699
<b>Total Capital Grants And Contributions</b>	<b>9,613,746</b>	<b>12,036,784</b>
<b>Change In Net Position</b>	<b>64,110,941</b>	<b>48,940,483</b>
<b>Net Position - Beginning Of Year</b>	<b>2,327,057,113</b>	<b>2,278,116,630</b>
<b>Net Position - End Of Year</b>	<b>\$ 2,391,168,054</b>	<b>\$ 2,327,057,113</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## STATEMENTS OF CASH FLOWS

	For The Years Ended June 30,	
	2017	2016
<b>Cash Flows From Operating Activities</b>		
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)
<b>Net Cash Provided By Operating Activities</b>	<u>156,258,907</u>	<u>127,665,155</u>
<b>Cash Flows Provided By Non-Capital Financing Activities</b>		
Taxes levied and collected	<u>32,013,277</u>	<u>25,583,025</u>
<b>Cash Flows From Capital And Related Financing Activities</b>		
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
<b>Net Cash Provided By (Used In) Capital And Related Financing Activities</b>	<u>(154,634,599)</u>	<u>(91,511,638)</u>
<b>Cash Flows From Investing Activities</b>		
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
<b>Net Cash Provided By (Used In) Investing Activities</b>	<u>(34,721,049)</u>	<u>(74,347,407)</u>
<b>Net Decrease In Cash And Cash Equivalents</b>	(1,083,464)	(12,610,865)
<b>Cash And Cash Equivalents At Beginning Of Year</b>	<u>49,196,476</u>	<u>61,807,341</u>
<b>Cash And Cash Equivalents At End Of Year</b>	<u>\$ 48,113,012</u>	<u>\$ 49,196,476</u>
<b>Non-Cash Capital And Investing Activities</b>		
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	<u>2,706,316</u>	<u>743,050</u>

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# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## STATEMENTS OF CASH FLOWS *(Continued)*

	For The Years Ended June 30,	
	2017	2016
<b>Reconciliation Of Operating Income To Net Cash Flows Provided By Operating Activities</b>		
<b>Operating Income</b>	\$ 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)
<b>Net Cash Provided By Operating Activities</b>	<u>\$ 156,258,907</u>	<u>\$ 127,665,155</u>



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# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## NOTES TO FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

### 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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### **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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Notes To Financial Statements (*Continued*)

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## Notes To Financial Statements *(Continued)*

### **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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Notes To Financial Statements** *(Continued)*

#### **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 METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Notes To Financial Statements (*Continued*)**

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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Notes To Financial Statements *(Continued)*

#### **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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## Notes To Financial Statements (*Continued*)

### **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.



## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements *(Continued)*

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

Investment Type	2017		2016	
	Cost	Fair Value	Cost	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
<b>Total</b>	<b>\$ 636,542,154</b>	<b>\$ 635,191,192</b>	<b>\$ 598,411,856</b>	<b>\$ 598,908,720</b>

#### Reconciliation to the financial statements:

	2017	2016
<u>Cash and Cash Equivalents</u>		
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
<u>Investments</u>		
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
<u>Long-Term Investments</u>		
Restricted Non-Current	54,726,378	69,479,563
Other	65,116,013	166,483,086
	<u>\$ 635,191,192</u>	<u>\$ 598,908,720</u>

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements (Continued)

#### Interest Rate Risk

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

Investment Type	2017		2016	
	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
<b>Total</b>	<b>\$ 587,078,180</b>	<b>0.43</b>	<b>\$ 549,712,244</b>	<b>0.53</b>

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### **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:

Issuer	Percent Of Total Investments	
	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

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### **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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

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
	<hr/>
	17,884,236
Less: Amount representing interest	4,898,251
	<hr/>
	<u>\$ 12,985,985</u>

Classification in Statement of Net Position:

Current	\$ 602,919
Non-current	<hr/>
	12,383,066
	<hr/>
Total	<u>\$ 12,985,985</u>

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

### 4. Capital Assets

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

	Balance			Balance	
	June 30, 2016	Additions	Deletions	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	
<b>Total Capital Assets</b>	<b>\$ 3,052,043,212</b>	<b>\$ 293,514,977</b>	<b>\$ 93,319,948</b>	<b>\$ 3,252,238,241</b>	

	Balance			Balance	
	June 30, 2015	Additions	Deletions	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	
<b>Total Capital Assets</b>	<b>\$ 2,891,569,311</b>	<b>\$ 271,442,611</b>	<b>\$ 110,968,710</b>	<b>\$ 3,052,043,212</b>	

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

#### **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.



# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

### 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	—
	<u>\$ 1,623,308,793</u>	<u>\$ 1,203,366,916</u>	<u>\$ 186,146,682</u>	<u>\$ 38,076,771</u>	1,351,436,827	<u>\$ 42,733,909</u>
Add:						
Unamortized premium, net of discount					<u>124,465,181</u>	
<b>Total Bonds and Notes Payable</b>					<u>\$ 1,475,902,008</u>	
<b>Current Portion of Bonds and Notes Payable</b>					\$ 42,733,909	
<b>Non-Current Bonds and Notes Payable</b>					<u>1,433,168,099</u>	
<b>Total Bonds and Notes Payable</b>					<u>\$ 1,475,902,008</u>	
<b>Net Pension Liability</b>		<u>\$ 52,600,003</u>	<u>\$ 14,439,182</u>	<u>\$ —</u>	<u>\$ 67,039,185</u>	<u>\$ —</u>
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		<u>7,003,477</u>	<u>2,576,404</u>	<u>1,516,800</u>	<u>8,063,081</u>	<u>—</u>
<b>Total Deposits and Accrued Expenses</b>		<u>\$ 16,322,323</u>	<u>\$ 3,076,088</u>	<u>\$ 2,071,992</u>	<u>\$ 17,326,419</u>	<u>\$ 2,188,729</u>
<b>Current Portion (Compensated absences) in Current Deposits and Accrued Expenses</b>					\$ 2,188,729	
<b>Non-Current Deposits and Accrued Expenses</b>					<u>15,137,690</u>	
<b>Total Deposits and Accrued Expenses</b>					<u>\$ 17,326,419</u>	

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

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

	<b>Original Issuance Amounts</b>	<b>Balance June 30, 2015</b>	<b>Additions</b>	<b>Retirements</b>	<b>Balance June 30, 2016</b>	<b>Current Portion</b>
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
	<u>\$ 1,467,808,793</u>	<u>\$ 1,056,509,465</u>	<u>\$ 266,477,810</u>	<u>\$ 119,620,359</u>	<u>1,203,366,916</u>	<u>\$ 38,059,873</u>
Add:						
Unamortized premium, net of discount					112,035,478	
<b>Total Bonds and Notes Payable</b>					<u>\$ 1,315,402,394</u>	
<b>Current Portion of Bonds and Notes Payable</b>					\$ 38,059,873	
<b>Non-Current Bonds and Notes Payable</b>					<u>1,277,342,521</u>	
<b>Total Bonds and Notes Payable</b>					<u>\$ 1,315,402,394</u>	
<b>Net Pension Liability</b>		<u>\$ 39,895,991</u>	<u>\$ 12,704,012</u>	<u>\$ —</u>	<u>\$ 52,600,003</u>	<u>\$ —</u>
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		<u>5,968,543</u>	<u>2,554,734</u>	<u>1,519,800</u>	<u>7,003,477</u>	<u>—</u>
<b>Total Deposits and Accrued Expenses</b>		<u>\$ 15,173,044</u>	<u>\$ 3,418,221</u>	<u>\$ 2,268,942</u>	<u>\$ 16,322,323</u>	<u>\$ 2,124,275</u>
<b>Current Portion (Compensated absences) in Current Deposits and Accrued Expenses</b>					\$ 2,124,275	
<b>Non-Current Deposits and Accrued Expenses</b>					<u>14,198,048</u>	
<b>Total Deposits and Accrued Expenses</b>					<u>\$ 16,322,323</u>	

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### **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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### **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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.



## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements (*Continued*)

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
<b>Total</b>	<b>\$ 1,140,585,000</b>	<b>\$ 784,745,476</b>	<b>\$ 1,925,330,476</b>

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

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

#### **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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### **Notes To Financial Statements *(Continued)***

#### **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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

#### 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
<b>Total</b>	<b>\$ 47,786,000</b>	<b>\$ 7,150,995</b>	<b>\$ 54,936,995</b>

#### 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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

#### **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
<b>Total</b>	<b>\$ 35,692,300</b>	<b>\$ 5,074,408</b>	<b>\$ 40,766,708</b>

#### **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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

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
<b>Total</b>	<b>\$ 28,361,000</b>	<b>\$ 3,588,306</b>	<b>\$ 31,949,306</b>

#### 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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

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:

<b>State of Missouri Direct Loan Series 2010A</b>			
<b>Years ending June 30,</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
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
<b>Total</b>	<b>\$ 6,222,400</b>	<b>\$ 723,040</b>	<b>\$ 6,945,440</b>

### **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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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
<b>Total</b>	<b>\$ 16,440,500</b>	<b>\$ 1,697,281</b>	<b>\$ 18,137,781</b>

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.



## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Notes To Financial Statements (*Continued*)

#### ***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 expended 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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### ***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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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)
<b>Total</b>	<b>1,517</b>	<b>1,531</b>	<b>(14)</b>

*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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### ***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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

*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:

Asset Class	December 31, 2016	
	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%	

Asset Class	December 31, 2015	
	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%	

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

*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

Changes in Net Pension Liability	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(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

Changes in Net Pension Liability	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(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

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

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

December 31, 2015			
	1%	Current	1%
	Decrease	Discount Rate	Increase
	(6.00%)	(7.00%)	(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



## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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:

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

#### ***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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

**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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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:

<b>Months Of Continuous Service</b>	<b>Vested(Non- Forfeitable) Percentage</b>
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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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 METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements (*Continued*)

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

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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:

<u>Year</u>	<u>Medical</u>	<u>Year</u>	<u>Medical</u>
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 METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

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



## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements (*Continued*)

Age	Disability
	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	<u>\$ 4,461,069</u>	<u>\$ 4,076,994</u>	<u>\$ 4,317,384</u>

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements *(Continued)*

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 METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Notes To Financial Statements (*Continued*)

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.

## **THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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### Notes To Financial Statements (*Continued*)

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

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

Assets	June 30,	
	2017	2016
<b>Current Assets</b>		
<b>Unrestricted Current Assets</b>		
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
<b>Total Unrestricted Current Assets</b>	<b>379,705,406</b>	<b>275,322,304</b>
<b>Non-Current Assets</b>		
<b>Restricted Assets</b>		
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	—
<b>Total Restricted Non-Current Assets</b>	<b>192,368,139</b>	<b>163,431,929</b>
<b>Other Assets</b>		
Notes receivable	12,425,336	12,999,370
Long-term investments	61,275,000	156,994,123
<b>Total Other Assets</b>	<b>73,700,336</b>	<b>169,993,493</b>
<b>Capital Assets</b>		
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
	<b>3,199,840,880</b>	<b>3,113,927,998</b>
Less: Accumulated depreciation	1,177,505,880	1,111,825,269
Net depreciable assets	<b>2,022,335,000</b>	<b>2,002,102,729</b>
Non-depreciable:		
Land	64,121,437	63,374,303
Construction in progress	691,631,657	519,044,798
<b>Net Capital Assets</b>	<b>2,778,088,094</b>	<b>2,584,521,830</b>
<b>Total Non-Current Assets</b>	<b>3,044,156,569</b>	<b>2,917,947,252</b>
<b>Total Assets</b>	<b>3,423,861,975</b>	<b>3,193,269,556</b>
<b>Deferred Outflows of Resources:</b>		
Bonds and notes payable-Deferred loss on refunding	11,320,670	11,973,700
Pension-related outflows	32,297,785	26,520,052
<b>Total Deferred Outflows of Resources</b>	<b>43,618,455</b>	<b>38,493,752</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

### WASTEWATER SEGMENT STATEMENTS OF NET POSITION (Continued)

	June 30,	
	2017	2016
<b>Liabilities</b>		
<b>Current Liabilities-Payable From Unrestricted Assets</b>		
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
<b>Total Current Liabilities-Payable From Unrestricted Assets</b>	<b>122,406,198</b>	<b>113,901,566</b>
<b>Current Liabilities-Payable From Restricted Assets</b>		
Contracts and accounts payable	28,257	36,495
Retainage payable	181,642	156,537
<b>Total Current Liabilities-Payable From Restricted Assets</b>	<b>209,899</b>	<b>193,032</b>
<b>Total Current Liabilities</b>	<b>122,616,097</b>	<b>114,094,598</b>
<b>Non-Current Liabilities</b>		
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
<b>Total Non-Current Liabilities</b>	<b>1,505,830,167</b>	<b>1,336,272,576</b>
<b>Total Liabilities</b>	<b>1,628,446,264</b>	<b>1,450,367,174</b>
<b>Deferred Inflow of Resources:</b>		
Pension-related inflows	3,887,511	4,868,566
<b>Total Deferred Inflow of Resources</b>	<b>3,887,511</b>	<b>4,868,566</b>
<b>Net Position</b>		
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
<b>Total Net Position</b>	<b>\$ 1,835,146,655</b>	<b>\$ 1,776,527,568</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

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

	<b>For The Years</b>	
	<b>Ended June 30,</b>	
	<b>2017</b>	<b>2016</b>
<b>Operating Revenues</b>		
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
<b>Total Operating Revenues</b>	<b>333,469,677</b>	<b>318,463,297</b>
<b>Operating Expenses</b>		
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
<b>Total Operating Expenses</b>	<b>245,998,152</b>	<b>245,099,621</b>
<b>Operating Income</b>	<b>87,471,525</b>	<b>73,363,676</b>
<b>Non-Operating Revenues</b>		
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
<b>Total Non-Operating Revenues</b>	<b>2,591,794</b>	<b>3,979,645</b>
<b>Non-Operating Expenses</b>		
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
<b>Total Non-Operating Expenses</b>	<b>37,759,781</b>	<b>38,595,415</b>
<b>Income Before Capital Grants And Contributions</b>	<b>52,303,538</b>	<b>38,747,906</b>
<b>Capital Grants And Contributions</b>		
Utility plant contributed	3,508,950	7,036,329
Grant revenue	2,806,599	765,699
<b>Total Capital Grants And Contributions</b>	<b>6,315,549</b>	<b>7,802,028</b>
<b>Change In Net Position</b>	<b>58,619,087</b>	<b>46,549,934</b>
<b>Net Position - Beginning Of Year</b>	<b>1,776,527,568</b>	<b>1,729,977,634</b>
<b>Net Position - End Of Year</b>	<b>\$ 1,835,146,655</b>	<b>\$ 1,776,527,568</b>



# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

### WASTEWATER SEGMENT STATEMENTS OF CASH FLOWS

	For The Years Ended June 30,	
	2017	2016
<b>Cash Flows From Operating Activities</b>		
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)
<b>Net Cash Provided By Operating Activities</b>	<b>174,023,578</b>	<b>139,715,887</b>
<b>Cash Flows Provided By (Used In) Non-Capital Financing Activities</b>		
Taxes levied and collected	74,474	(86,140)
<b>Cash Flows From Capital And Related Financing Activities</b>		
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
<b>Net Cash Provided By (Used In) Capital And Related Financing Activities</b>	<b>(139,795,387)</b>	<b>(81,403,833)</b>
<b>Cash Flows From Investing Activities</b>		
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
<b>Net Cash Provided By (Used In) Investing Activities</b>	<b>(34,091,345)</b>	<b>(69,439,071)</b>
<b>Net Increase (Decrease) In Cash And Cash Equivalents</b>	<b>211,320</b>	<b>(11,213,157)</b>
<b>Cash And Cash Equivalents At Beginning Of Year</b>	<b>42,587,138</b>	<b>53,800,295</b>
<b>Cash And Cash Equivalents At End Of Year</b>	<b>\$ 42,798,458</b>	<b>\$ 42,587,138</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements (Continued)

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,	
	2017	2016
<b>Assets</b>		
<b>Current Assets</b>		
<b>Unrestricted Current Assets</b>		
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
<b>Total Unrestricted Current Assets</b>	<b>18,063,946</b>	<b>11,858,024</b>
<b>Restricted Current Assets</b>		
Cash and cash equivalents	2,171,935	2,065,003
Investments	29,674,144	13,393,010
<b>Total Restricted Current Assets</b>	<b>31,846,079</b>	<b>15,458,013</b>
<b>Total Current Assets</b>	<b>49,910,025</b>	<b>27,316,037</b>
<b>Non-Current Assets</b>		
<b>Restricted Assets</b>		
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
<b>Total Restricted Non-Current Assets</b>	<b>44,046,563</b>	<b>61,479,621</b>
<b>Other Assets</b>		
Long-term investments	3,841,013	9,488,963
<b>Total Other Assets</b>	<b>3,841,013</b>	<b>9,488,963</b>
<b>Capital Assets</b>		
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
<b>Net Capital Assets</b>	<b>474,150,147</b>	<b>467,521,382</b>
<b>Total Non-Current Assets</b>	<b>522,037,723</b>	<b>538,489,966</b>
<b>Total Assets</b>	<b>571,947,748</b>	<b>565,806,003</b>
<b>Deferred Outflow of Resources:</b>		
Pension-related outflows	5,368,001	4,624,211
<b>Total Deferred Outflow of Resources</b>	<b>5,368,001</b>	<b>4,624,211</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

### STORMWATER SEGMENT STATEMENTS OF NET POSITION *(Continued)*

	June 30,	
	2017	2016
<b>Liabilities</b>		
<b>Current Liabilities-Payable From Unrestricted Assets</b>		
Contracts and accounts payable	\$ 20,000	\$ 23,762
Deposits and accrued expenses	9,240,251	9,633,010
Retainage payable	545	545
<b>Total Current Liabilities-Payable From Unrestricted Assets</b>	<b>9,260,796</b>	<b>9,657,317</b>
<b>Current Liabilities-Payable From Restricted Assets</b>		
Contracts and accounts payable	1,236,740	1,250,044
Retainage payable	565,000	282,010
<b>Total Current Liabilities-Payable From Restricted Assets</b>	<b>1,801,740</b>	<b>1,532,054</b>
<b>Total Current Liabilities</b>	<b>11,062,536</b>	<b>11,189,371</b>
<b>Non-Current Liabilities</b>		
Net pension liability	9,514,807	7,867,996
<b>Total Non-Current Liabilities</b>	<b>9,514,807</b>	<b>7,867,996</b>
<b>Total Liabilities</b>	<b>20,577,343</b>	<b>19,057,367</b>
<b>Deferred Inflow of Resources:</b>		
Pension-related inflows	717,007	843,302
<b>Total Deferred Inflow of Resources</b>	<b>717,007</b>	<b>843,302</b>
<b>Net Position</b>		
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
<b>Total Net Position</b>	<b>\$ 556,021,399</b>	<b>\$ 550,529,545</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

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

	<b>For The Years Ended June 30,</b>	
	<b>2017</b>	<b>2016</b>
<b>Operating Revenues</b>		
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
<b>Total Operating Revenues</b>	<b>21,312</b>	<b>1,394,434</b>
<b>Operating Expenses</b>		
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
<b>Total Operating Expenses</b>	<b>29,079,523</b>	<b>27,996,084</b>
<b>Operating Income (Loss)</b>	<b>(29,058,211)</b>	<b>(26,601,650)</b>
<b>Non-Operating Revenues</b>		
Property taxes levied by the District	32,429,499	25,688,583
Investment income	445,947	741,561
<b>Total Non-Operating Revenues</b>	<b>32,875,446</b>	<b>26,430,144</b>
<b>Non-Operating Expenses</b>		
Net loss on disposal and sale of capital assets	50,203	14,636
Non-recurring projects and studies	1,573,375	1,658,065
<b>Total Non-Operating Expenses</b>	<b>1,623,578</b>	<b>1,672,701</b>
<b>Income (Loss) Before Capital Contributions</b>	<b>2,193,657</b>	<b>(1,844,207)</b>
<b>Capital Contributions</b>		
Utility plant contributed	3,298,197	4,234,756
<b>Total Capital Contributions</b>	<b>3,298,197</b>	<b>4,234,756</b>
<b>Change In Net Position</b>	<b>5,491,854</b>	<b>2,390,549</b>
<b>Net Position - Beginning Of Year</b>	<b>550,529,545</b>	<b>548,138,996</b>
<b>Net Position - End Of Year</b>	<b>\$ 556,021,399</b>	<b>\$ 550,529,545</b>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

### STORMWATER SEGMENT STATEMENTS OF CASH FLOWS

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

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### Notes To Financial Statements (*Continued*)

#### 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.

#### Tax Abatements Entered Into By St. Louis County and Cities Located In St. Louis County

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 METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

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.

## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

### Notes To Financial Statements *(Continued)*

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

#### 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 METROPOLITAN ST. LOUIS SEWER DISTRICT

## Notes To Financial Statements *(Continued)*

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		June 30, 2016	
	TIF Incremental Values	Reduced Tax Revenues	TIF Incremental Values	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	<u>\$ 1,189,048,013</u>	<u>\$ 794,915</u>	<u>\$ 1,152,287,903</u>	<u>\$ 565,388</u>

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	June 30, 2016
	Reduced Tax Revenues	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	<u>290,218</u>	<u>195,033</u>
Total Reduced Tax Revenues	<u>\$ 1,326,394</u>	<u>\$ 1,096,867</u>

## **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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## 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
<b>Total Pension Liability</b>			
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
 <b>Fiduciary Net Position</b>			
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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## 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**

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	<b>Page</b>
<b>Financial Trends</b>	
These schedules contain trend information to help the reader understand how the District's financial performance and well-being have changed over time .....	89 – 90
<b>Revenue Capacity</b>	
These schedules contain information to help the reader assess the District's most significant local revenue sources, the user charge .....	91 – 98
<b>Debt Capacity</b>	
These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future .....	99 – 101
<b>Demographic And Economic Information</b>	
These schedules offer demographic and economic indicators to help the reader understand the environment within which the District's financial activities take place .....	102 – 104
<b>Operating Information</b>	
These schedules contain service and infrastructure data to help the reader understand how the information in the District's financial report relates to the services the District provides and the activities it performs .....	105 – 106

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

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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

		Fiscal Year				
		2008	2009	2010	2011	2012
<u>Net Position</u>						
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	\$	<u>2,125,962</u>	<u>\$ 2,187,617</u>	<u>\$ 2,207,650</u>	<u>\$ 2,197,019</u>	<u>\$ 2,209,903</u>

		Fiscal Year				
		2013	2014	2015 <sup>a</sup>	2016 <sup>a</sup>	2017 <sup>a</sup>
<u>Net Position</u>						
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	\$	<u>2,240,058</u>	<u>\$ 2,267,952</u>	<u>\$ 2,278,116</u>	<u>\$ 2,327,057</u>	<u>\$ 2,391,168</u>

<sup>a</sup> Years 2015 to current include a change in the calculation of the net position components which is not reflected in years prior.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## 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

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## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### OPERATING REVENUES BY SOURCE LAST TEN FISCAL YEARS

<b>Fiscal Year</b>	<b>Sewer Service Charges, Net</b>	<b>Licenses, Permits, and Other Fees</b>	<b>Other</b>	<b>Total Operating Revenues</b>
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



# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## OPERATING EXPENSES LAST TEN FISCAL YEARS

<b>Fiscal Year</b>	<b>Employment Costs</b>	<b>Utilities</b>	<b>Materials and Supplies</b>	<b>Contracted Services</b>	<b>Chemical Supplies</b>
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

<b>Fiscal Year</b>	<b>Insurance</b>	<b>Other</b>	<b>Subtotal, Expenses before Depreciation</b>	<b>Depreciation</b>	<b>Total Operating Expenses</b>
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

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## NON-OPERATING REVENUES AND EXPENSES LAST TEN FISCAL YEARS

	Fiscal Year				
	2008	2009	2010	2011	2012
<u>Non-operating revenues</u>					
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	<u>45,518,674</u>	<u>15,459,668</u>	<u>8,219,864</u>	<u>31,415,743</u>	<u>27,306,249</u>
<u>Non-operating expenses</u>					
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	<u>8,259,157</u>	<u>18,345,627</u>	<u>25,780,534</u>	<u>27,086,711</u>	<u>25,935,920</u>
Net non-operating revenue (expense)	<u>\$ 37,259,517</u>	<u>\$ (2,885,959)</u>	<u>\$ (17,560,670)</u>	<u>\$ 4,329,032</u>	<u>\$ 1,370,329</u>

	Fiscal Year				
	2013	2014	2015	2016	2017
<u>Non-operating revenues</u>					
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	<u>27,366,260</u>	<u>30,719,374</u>	<u>27,802,236</u>	<u>30,409,789</u>	<u>35,467,240</u>
<u>Non-operating expenses</u>					
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	<u>26,534,204</u>	<u>34,402,237</u>	<u>40,876,936</u>	<u>40,268,116</u>	<u>39,383,359</u>
Net non-operating revenue (expense)	<u>\$ 832,056</u>	<u>\$ (3,682,863)</u>	<u>\$ (13,074,700)</u>	<u>\$ (9,858,327)</u>	<u>\$ (3,916,119)</u>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## USER CHARGE RATES As Of June 30, 2017

Type of Monthly Charge	Unmetered <sup>c</sup>	Metered	
		Residential <sup>c</sup>	Non-Residential
<u>Wastewater User Charge</u>			
Base Charge	\$ 19.46	\$ 19.46	\$ 19.46
Compliance Charge <sup>a</sup>			
Tier 1	—	—	2.86
Tier 2	—	—	57.20
Tier 3	—	—	125.84
Tier 4	—	—	185.90
Tier 5	—	—	243.10
Volume Charges			
per Ccf <sup>b</sup>	—	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 <sup>a</sup>			
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:**

<sup>a</sup> Applicable only to non-residential customers.

<sup>b</sup> Ccf = Hundred cubic feet.

<sup>c</sup> User charges for certain low income residential users will be 50 percent of the regular user charge.

Source: Finance Department

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## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### USER CHARGE REVENUES LAST TEN FISCAL YEARS

<b>Fiscal Year</b>	<b>Wastewater Charges Billed<sup>1</sup></b>	<b>Wastewater Charges Collected<sup>2</sup></b>	<b>Collections as a % of Wastewater Charges Billed</b>
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.

<sup>1</sup> Wastewater Charges Billed includes wastewater user charge revenues billed and accrued for the year.

<sup>2</sup> Wastewater Charges Collected includes wastewater user charge revenues collected for the current year and previous years billings.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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

	Fiscal Year				
	<u>2008</u> <sup>a</sup>	<u>2009</u>	<u>2010</u> <sup>b</sup>	<u>2011</u> <sup>c</sup>	<u>2012</u>
Residential:					
Single Family/Unit a	\$ 344.88	\$ 344.88 <sup>1</sup>	\$ 351.12 <sup>1</sup>	\$ 333.60 <sup>1</sup>	\$ 347.64
Multi-Family/Unit a	299.76	299.76	305.04	285.12	296.28
Commercial/Industrial:					
Service Charge/Unit <sup>2</sup>	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				
	<u>2013</u> <sup>d</sup>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u> <sup>e</sup>
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 <sup>2</sup>	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:

<sup>1</sup> Years 2008-2010 saw an impervious rate charge that averaged \$36 per year per customer. This was discontinued in 2011.

<sup>2</sup> 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.

<sup>a</sup> Ordinance 12561, effective January 1, 2008, changed wastewater rates. Ordinance 12560, changed stormwater rates, effective March 1, 2008.

<sup>b</sup> Ordinance 12754, effective July 1, 2009, changed wastewater rates.

<sup>c</sup> Ordinance 13021, effective July 1, 2010, changed wastewater rates through FY 2012.

<sup>d</sup> Ordinance 13402, effective July 1, 2012, changed wastewater rates through FY 2016.

<sup>e</sup> Ordinance 14395, effective July 1, 2016, changed wastewater rates through FY 2020.

Source: Finance Department

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## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### NUMBER OF CUSTOMERS BY TYPE LAST TEN FISCAL YEARS

<b>Fiscal Year</b>	<b>Single Family Residential</b>	<b>Multi- Family Residential</b>	<b>Non- Residential</b>	<b>Total Accounts</b>	
2008	391,181	54,862	32,336	478,379	<sup>a</sup>
2009	388,791	51,441	32,161	472,393	<sup>a</sup>
2010	387,670	50,867	31,939	470,476	<sup>a</sup>
2011	362,739	43,471	24,702	430,912	<sup>b</sup>
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

<sup>a</sup> 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.

<sup>b</sup> The number of accounts were revised as stormwater accounts were underreported.

**THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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**TEN LARGEST CUSTOMERS**

**CURRENT YEAR AND NINE YEARS AGO**

**Fiscal Year 2017**

<b>Customer</b>	<b>User Charges</b>	
	<b>Amount</b>	<b>%</b>
InBev Anheuser-Busch	\$ 5,165,348	1.57%
City of St. Louis	2,320,129	0.71%
Washington University	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%
<b>Subtotal (10 largest)</b>	<b>16,142,892</b>	<b>4.92%</b>
Balance from other customers	312,216,634	95.08%
<b>Grand totals</b>	<b>\$ 328,359,526</b>	<b>100.00%</b>

**Fiscal Year 2008**

<b>Customer</b>	<b>User Charges</b>	
	<b>Amount</b>	<b>%</b>
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%
<b>Subtotal (10 largest)</b>	<b>14,485,186</b>	<b>6.68%</b>
Balance from other customers	202,133,231	93.32%
<b>Grand totals</b>	<b>\$ 216,618,417</b>	<b>100.00%</b>

Source: Budget Division

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## RATIOS OF OUTSTANDING DEBT BY TYPE LAST TEN FISCAL YEARS

Fiscal Year	Revenue Bonds			Capital Lease	Unamortized Premium, Net of Discount	Total		As a Share of Personal Income
	Senior	Subordinate	Subordinate Direct Loans			Amount	Per Capita	
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



# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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## 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
	<b>\$ 2,060,091,643</b>	<b>2,034,633,108</b>	<b>98.8%</b>
Total Direct Debt		<b>1,475,902,008</b>	
Total Direct and Overlapping Debt		<b>\$ 3,510,535,116</b>	

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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## PLEDGED REVENUE COVERAGE LAST TEN FISCAL YEARS

Fiscal Year	Operating Revenues	Non-operating Revenues	Gross Revenues	Less:	Net Available Revenues
				Operating Expenses (excluding depreciation & GASB 68 pension exp)	
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.

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## DEMOGRAPHIC AND ECONOMIC STATISTICS LAST TEN FISCAL YEARS

Fiscal Year	Populations	Personal Income (millions)	Per Capita Personal Income	Unemployment Rate			Labor Force	Total Number of Households (1)
				Saint Louis				
				City	County	State		
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>

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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

Employer	Fiscal Year 2017			Fiscal Year 2008		
	Employees <sup>(1)</sup>	Percentage of Total	Rank	Employees <sup>(1)</sup>	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
	<u>150,316</u>	<u>20%</u>		<u>132,269</u>	<u>20%</u>	

### 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*

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## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### EMPLOYMENT LEVEL LAST TEN FISCAL YEARS

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
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	<u>871</u>	<u>909</u>	<u>935</u>	<u>892</u>	<u>922</u>	<u>931</u>	<u>935</u>	<u>949</u>	<u>944</u>	<u>951</u>

Source: Human Resources Department

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## THE METROPOLITAN ST. LOUIS SEWER DISTRICT

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### AVERAGE FLOW LAST TEN FISCAL YEARS

<b>Fiscal Year</b>	<b>Average Sewage Treatment in Millions of Gallons per Day</b>
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

# THE METROPOLITAN ST. LOUIS SEWER DISTRICT

## OPERATING AND CAPITAL INDICATORS LAST TEN FISCAL YEARS

	Fiscal Year				
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
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) <sup>a</sup>	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				
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
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) <sup>a</sup>	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:**

<sup>a</sup> Million gallons per day.



**THE METROPOLITAN ST. LOUIS SEWER DISTRICT**  
2350 MARKET STREET, ST. LOUIS, MO 63103  
[WWW.STLMSD.COM](http://WWW.STLMSD.COM) - 314-768-6260



## **APPENDIX B**

### **Information Regarding the District's Service Area**

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## INFORMATION REGARDING THE DISTRICT'S SERVICE AREA

The Series 2017A Bonds are special, limited obligations of the District and are not obligations of The City of St. Louis, Missouri (the “**City**”), St. Louis County, Missouri (the “**County**”), the State of Missouri (the “**State**”), or any political subdivision of the City, the County or the State. The Series 2017A Bonds are payable solely from the revenues described in this Official Statement. As described elsewhere in this Official Statement, the service area of the District consists of the City and most of the County. The following information regarding the City and the County has been obtained from sources that the District believes to be reliable, but should not be construed as an indication that the Series 2017A Bonds are payable from any source other than the revenues of the District described in this Official Statement. See “**SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2017A BONDS,**” “**THE DISTRICT,**” and “**THE CIRP**” in this Official Statement. Such information is not guaranteed as to accuracy or completeness by the Underwriters and is not to be construed as a representation by the Underwriters. The Underwriters have not verified this information. No representation is made by the Underwriters as to the accuracy or adequacy of such information or as to the absence of material adverse changes in such information subsequent to the date as to which such information is provided.

The delivery of this Official Statement, including this **Appendix B**, is not intended to create any implication that there has been no change in the affairs of the District, the City or the County since the date hereof or that the information contained or incorporated by reference in this **Appendix B** is correct as of any time subsequent to its date.

### THE SERVICE AREA

As more fully described in this Official Statement under the caption “**THE DISTRICT - General**”, the District was organized in 1954 pursuant to Article VI, Section 30 of the State Constitution, which empowers the people of the City and the County “to establish a metropolitan district or districts for the functional administration of services common to the area included therein.” The District provides a metropolitan-wide system of wastewater treatment and sanitary sewerage facilities for the collection, treatment and disposal of sewage within the City and most of the more heavily populated areas of the County. When the District began operations, it took over the publicly-owned wastewater and stormwater drainage facilities within its then-existing jurisdiction and began the construction of an extensive system of collector and interceptor sewers and treatment facilities. In subsequent years, voters have approved the District’s annexation of a 270 square mile area of the lower Missouri River and lower Meramec River watersheds in the County, and the District purchased various investor-owned or municipally-operated systems serving areas of the County. The District’s service area now encompasses approximately 520 square miles, including all of the City’s approximately 66 square miles and approximately 454 square miles (approximately 87%) of the County. A map showing the District’s current service area appears on the back cover of this Official Statement. The current population served by the District is approximately 1.3 million.

#### The City of St. Louis, Missouri

The history of the City dates to 1764 when Pierre Laclède and Auguste Chouteau selected the site as a fur trading post due in large part to its proximity to the confluence of the Mississippi and Missouri Rivers. The City was incorporated in 1823, and its current boundaries were established in 1876, when voters approved separation from the County and establishment of a home rule charter. The City is a constitutional charter city not a part of any county, and exists under and pursuant to its Charter and the laws of the State. The eastern boundary of the City is formed by the Mississippi River, and the City is bordered on the north, west and south by the County. The City occupies approximately 66 square miles, all of which lie within the service area of the District.

## St. Louis County, Missouri

The County was formed by a proclamation of Governor William Clark on October 1, 1812, nine years before Missouri attained statehood in 1821. In 1876, by vote of the entire county (which at the time included both City and County), the City separated itself from the County. The City of Clayton, Missouri is the County seat and located in the east central part of the County. Approximately sixty-six percent of the land area of the County is occupied by 90 self-governing municipalities, containing approximately two-thirds of the County's population. The remaining unincorporated area comes under the direct jurisdiction of the County government. The County is a constitutional charter county operating and existing under its Charter and the laws of the State. The County covers an area of approximately 524 square miles, approximately 454 square miles of which lie within the service area of the District.

### **ECONOMIC AND DEMOGRAPHIC DATA**

#### Population

The City and the County are a part of the St. Louis, Missouri-Illinois Metropolitan Statistical Area (the "**St. Louis MSA**"), comprised of: the City, the County, and the counties of Franklin, Jefferson, Lincoln, St. Charles, and Warren in Missouri; the counties of Bond, Calhoun, Clinton, Jersey, Macoupin, Madison, Monroe and St. Clair in Illinois; and a portion of the City of Sullivan located in Crawford County, Missouri.

According to the U.S. Census Bureau, the population patterns for the City, the County, and the St. Louis MSA have been as stated directly below.

<u>Year</u>	<u>City</u>		<u>County</u>		<u>St. Louis MSA<sup>(1)</sup></u>	
	<u>Population</u>	<u>Percentage Change<sup>(2)</sup></u>	<u>Population</u>	<u>Percentage Change<sup>(2)</sup></u>	<u>Population</u>	<u>Percentage Change<sup>(2)</sup></u>
2000	348,189	-	1,016,315	-	2,698,687	-
2010	319,294	-8.30%	998,954	-1.71%	2,787,701	+3.30%
2011	319,144	-0.05	998,999	+0.00	2,793,811	+0.22
2012	319,085	-0.02	1,000,530	+0.15	2,796,903	+0.11
2013	317,947	-0.36	1,000,778	+0.02	2,800,154	+0.12
2014	316,840	-0.35	1,001,207	+0.04	2,804,862	+0.17
2015	314,875	-0.62	1,001,705	+0.05	2,808,330	+0.12
2016	311,404	-1.10	998,581	-0.31	2,807,002	-0.05

Source: U.S. Census Bureau Population for the years 2000 and 2010. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016 of the U.S. Census Bureau, Population Division for the years 2011 through 2016

<sup>(1)</sup> Washington County, Missouri was removed from the St. Louis MSA statistics effective retroactively to the 2010 Census.

<sup>(2)</sup> Percentages are rounded to the nearest hundredth.

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The largest municipalities within the District's service area are as follows:

<u>Municipality</u>	<u>Population</u> <u>2010</u>	<u>Population</u> <u>2000</u>	<u>Population</u> <u>1990</u>
St. Louis (City)	319,294	348,189	396,685
Florissant	52,158	50,497	51,206
Chesterfield	47,484	46,802	37,991
University City	35,371	37,428	40,087
Ballwin	30,404	31,283	21,816
Kirkwood	27,540	27,324	27,291
Hazelwood	25,703	26,206	15,512
Maryland Heights	27,472	25,756	25,407
Webster Groves	22,995	23,230	23,097
Ferguson	21,203	22,406	22,286

Source: Missouri Census Data Center

### Employment

The below table sets forth information relating to the average composition of non-farm employment in the City and the County for the years 1990, 2000, and 2010.

		<u>City</u> <u>Employment</u>			<u>County</u> <u>Employment</u>	
<u>Private Employment:</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>
Manufacturing	48,675	35,503	36,243	118,736	87,687	29,431
Agriculture	631	N/A	N/A	5,072	6,931	279
Mining	234	N/A	N/A	1,241	1,227	801
Construction	9,977	10,067	11,903	34,149	45,746	49,020
Transportation, Communication and Utilities	27,154	25,951	18,622	38,254	51,152	26,599
Wholesale Trade	19,399	15,224	15,691	42,228	46,961	28,334
Retail Trade	36,083	29,934	17,222	121,977	134,854	135,148
Finance, Insurance and Real Estate Services	28,422	25,436	13,738	62,176	77,300	79,435
Total Private Employment	<u>99,547</u>	<u>109,830</u>	<u>134,345</u>	<u>215,147</u>	<u>279,413</u>	<u>342,429</u>
Governmental Employment	270,122	252,951	183,081	638,980	731,271	507,530
Total	<u>321,222</u>	<u>300,043</u>	<u>215,132</u>	<u>692,763</u>	<u>791,097</u>	<u>562,932</u>

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Missouri State Census Data Center

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The below table sets forth the total labor force, number of employed and unemployed workers in the City and the County, for 2007 through 2016.

<u>Year</u>	City <sup>(1)</sup>			County <sup>(1)</sup>		
	<u>Employed</u>	<u>Unemployed</u>	<u>Total</u>	<u>Employed</u>	<u>Unemployed</u>	<u>Total</u>
2007	146,435	11,169	157,604	499,911	26,117	526,028
2008	144,629	12,285	156,914	487,113	31,358	518,471
2009	139,938	18,505	158,443	468,644	46,207	514,851
2010	145,882	18,956	164,838	487,113	47,758	534,871
2011	147,357	16,983	164,340	492,327	41,897	534,224
2012	146,972	13,896	160,868	491,787	34,282	526,069
2013	146,058	13,330	159,388	490,219	32,633	522,852
2014	148,789	12,411	161,200	499,383	31,066	530,449
2015	151,051	9,726	160,777	512,366	24,754	537,120
2016	152,364	8,683	161,047	516,815	22,594	539,409

<sup>(1)</sup> Figures are annual averages based on estimates and are not seasonally adjusted.

Source: Missouri Local Area Unemployment Statistics (LAUS) as produced by Missouri Economic Resource and Information Center (MERIC) in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics

The below table sets forth unemployment rates for the City, County, State and the United States of America (the “**Country**”) for 2008 through 2017.

<u>Fiscal</u> <u>Year</u>	<u>Unemployment Rates</u>			
	<u>City<sup>(1)</sup></u>	<u>County<sup>(1)</sup></u>	<u>State<sup>(1)</sup></u>	<u>Country<sup>(2)</sup></u>
2008	7.9	5.9	6.0	5.8
2009	11.5	9.7	9.5	9.3
2010	12.3	9.4	9.3	9.6
2011	11.8	8.9	9.0	8.9
2012	9.7	6.9	7.0	8.1
2013	10.5	7.3	7.1	7.8
2014	9.6	6.9	6.6	6.1
2015	7.1	5.5	5.8	5.1
2016	6.0	4.7	4.9	4.9
2017	4.7	3.7	4.9	4.2 <sup>(3)</sup>

<sup>(1)</sup> Source: District Comprehensive Annual Financial Report Fiscal Years Ended June 30, 2017 and 2016

<sup>(2)</sup> Source: Bureau of Labor Statistics

<sup>(3)</sup> As of October 25, 2017

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## Principal Employers

The below table sets forth the names and approximate number of employees of principal employers within the St. Louis MSA as of May 2017.

<u>St. Louis MSA Principal Employers</u>		
<u>Company</u>	<u>Nature of Business</u>	<u>Approximate Number of Employees<sup>(1)</sup></u>
BJC HealthCare	Healthcare	28,351
Wal-Mart Stores Inc.	Retail	22,290
Washington University in St. Louis	Education	15,818
SSM Healthcare	Healthcare	14,926
Mercy	Healthcare	14,195
Boeing Defense, Space & Security	Manufacturing	14,000
Scott Air Force Base	Government	13,000
Schnuck Markets Inc.	Retail	9,956
AT & T	Telecommunications	9,000
Archdiocese of St. Louis	Religious	8,780

Source: District Comprehensive Annual Financial Report Fiscal Years Ended June 30, 2017 and 2016, citing to the St. Louis Business Journal's Book of Lists 2017 (as of May 2017)

<sup>(1)</sup> Employees are for the St. Louis MSA, which includes several counties not served by the District.

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## Per Capita Personal Income

The below table presents per capita personal income for the District, the State and the Country for the years 2008 through 2017, the latest date for which such information is available.

Calendar	District <sup>(1)</sup>	State <sup>(1)</sup>	Country <sup>(1)</sup>
<u>Year</u>	<u>Per Capita Personal Income</u>	<u>Per Capita Personal Income</u>	<u>Per Capita Personal Income</u>
2008	46,079	37,738	40,947
2009	46,263	35,837	38,637
2010	44,822	36,406	39,791
2011	44,523	37,969	41,670
2012	44,323	39,049	42,693
2013	45,460	39,897	44,543
2014	46,237	41,613	46,129
2015	46,926	42,752	47,669
2016	47,749	42,926	49,246
2017	48,338	43,657 <sup>2</sup>	50,308 <sup>2</sup>

Source: District Comprehensive Annual Financial Report Fiscal Years Ended June 30, 2017 and 2016, citing to Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, and Missouri Economic Resource and Information Center (MERIC); and U.S. Department of Commerce, Bureau of Economic Analysis

<sup>(1)</sup> Per Capita Personal Income is the annual total personal income of residents divided by resident population as of July 1. **“Personal Income”** is the sum of net earnings by place of residence, rental income of persons, personal dividend income, personal interest income, and transfer payments. **“Net Earnings”** is earnings by place of work — the sum of wage and salary disbursements (payrolls), other labor income, and proprietors’ income — less personal contributions for social insurance, plus an adjustment to convert earnings by place of work to a place-of-residence basis. Personal Income is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars (no adjustment is made for price changes).

<sup>(2)</sup> As of September 26, 2017.

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## **APPENDIX C**

### **Definitions and Summaries of Certain Provisions of the Bond Ordinance and the Continuing Disclosure Agreement**

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*The following is a brief summary of certain provisions of the Master Bond Ordinance adopted by the District on April 22, 2004, as supplemented by the Ordinance adopted by the District on December 5, 2017 authorizing the issuance of the Series 2017A Bonds (collectively, the “Bond Ordinance”). This summary is not to be considered as a full statement of the provisions of such documents and is qualified by reference to and is subject to the complete Bond Ordinance, copies of which may be obtained from PFM Financial Advisors, LLC or Independent Public Advisors, LLC, as Co-Financial Advisors to the District. After delivery of the Series 2017A Bonds, copies of such documents will be available for inspection at the corporate trust office of the Paying Agent in St. Louis, Missouri or at such other office as shall be designated by the Paying Agent.*

## **DEFINITIONS**

*The definitions of certain words and terms used in this Official Statement with respect to the Series 2017A Bonds are set forth below:*

**“Accumulation Payments”** shall have the meaning ascribed therefor under the caption “Sinking Fund – Debt Service Reserve Account” in this **Appendix C**.

**“Additional Interest”** means, for any period during which any Pledged Bonds are owned by a Credit Facility Provider pursuant to a Credit Facility or Credit Facility Agreement, the amount of interest accrued on such Pledged Bonds at the Pledged Bond Rate less the amount of interest which would have accrued during such period on an equal Principal amount of Bonds at the Bond Rate.

**“Annual Budget”** means the annual budget of the District relating to the System (which shall include all costs, obligations and expenses properly allocable to the System), as amended or supplemented in accordance with established procedures of the District, adopted or in effect for a particular Fiscal Year.

**“Bond Counsel”** means any firm of nationally recognized bond counsel experienced in matters relating to tax-exempt financing, appointed by the District.

**“Bond Ordinance”** means the Master Bond Ordinance adopted by the Board of Trustees of the District on April 22, 2004, and the Ordinance adopted by the Board of Trustees of the District on December 5, 2017 authorizing the issuance of the Series 2017A Bonds, as the same may from time to time be modified, supplemented or amended by Supplemental Ordinances.

**“Bond Rate”** means the rate of interest per annum payable on specified Bonds other than Pledged Bonds.

**“Bond Register”** means the books for the registration, transfer and exchange of Bonds maintained by the Bond Registrar.

**“Bond Registrar”** means any bank or trust company designated as such by the District in the Bond Ordinance with respect to any of the Bonds. Such Bond Registrar shall perform the duties required of the Bond Registrar in the Bond Ordinance. The Bank of New York Mellon Trust Company, N.A. has been designated as Bond Registrar for the Bonds in the Master Bond Ordinance; provided, however, that in connection with the issuance of any SRF Bonds, the District shall appoint such separate Bond Registrar designated by the issuer of the SRF Bonds.

**“Bondholder”** means the registered owner of one or more Bonds.

**“Bonds”** means any revenue bonds authorized by and authenticated and delivered pursuant to the Bond Ordinance, including the Series 2017A Bonds, any other Senior Bonds, and any Subordinate Bonds.

**“Business Day”** means a day other than a Saturday, Sunday or holiday on which the Paying Agent, Bond Registrar or applicable Credit Facility Provider is scheduled in the normal course of its operations to be open to the public for conduct of its banking operations.

**“Charter”** means the District’s Charter (Plan) approved by the voters of the City of St. Louis, Missouri and St. Louis County, Missouri on February 9, 1954 and amended on November 7, 2000 and on June 5, 2012, and as further amended from time to time in accordance with its terms.

**“Chief Financial Officer”** means the individual presently holding the office of Secretary-Treasurer of the District or the individual presently holding the office of Assistant Secretary-Treasurer of the District, and any successors who might hereafter hold either such office, and any individual, body or authority to whom or to which may hereafter be delegated by law the duties, powers, authority, obligations or liabilities of either such office.

**“Chief Officer”** means the individual presently holding the office of Executive Director or Acting Executive Director of the District as appointed by the Governing Body and any successor who might hereafter hold such office, and any individual, body or authority to whom or which may hereafter be delegated by law the duties, powers, authority, obligations or liabilities of such office.

**“Code”** means the Internal Revenue Code of 1986, as amended, and the applicable regulations of the Treasury Department proposed or promulgated thereunder.

**“Consultant”** means an independent engineer or utility consultant or firm of independent engineers or utility consultants experienced in the planning and management of wastewater systems and having a nationally recognized reputation for such work.

**“Continuing Disclosure Agreement”** means (i) with respect to the Series 2017A Bonds, the Disclosure Dissemination Agent Agreement dated as of December 1, 2017 between the District and Digital Assurance Certification, L.L.C., as Dissemination Agent, as amended from time to time in accordance with its terms, in substantially the form attached as an exhibit to the Bond Ordinance, and (ii) with respect to any other series of Bonds, the continuing disclosure agreement relating to such series of Bonds, as amended from time to time in accordance with its terms.

**“Costs,”** with respect to any Project, means the total cost, paid or incurred, to study, plan, design, finance, acquire, construct, reconstruct, renovate, repair, replace, equip, install, or otherwise develop such Project and shall include, but shall not be limited to, the following costs and expenses relating to such Project and the reimbursement to the District for any such items previously paid by the District:

- (i) the cost of all lands, real or personal properties, rights, easements, and franchises acquired;
- (ii) the cost of all machinery and equipment, financing charges, and interest prior to and during construction and for six months after completion of construction;
- (iii) the cost of the acquisition, construction, reconstruction or installation of such Project;

(iv) the cost of engineering, architectural, development and supervisory services, fiscal agents' and legal expenses, plans and specifications, and other expenses necessary or incident to determining the feasibility or practicability of any Projects, administrative expenses, and such other expenses as may be necessary or incident to any financing by Bonds;

(v) the cost of placing such Project in operation;

(vi) the cost of condemnation of property necessary for such construction and operation;

(vii) Costs of Issuance; and

(viii) any other costs which may be incident to such Project.

**"Costs of Issuance"** means issuance costs with respect to the Bonds, including but not limited to the following: underwriters' spread (whether realized directly or derived through purchase of Bonds at a discount below the price at which they are expected to be sold to the public), management fee and expenses; Credit Facility fees and Reserve Account Credit Facility fees; counsel fees (including Bond Counsel, underwriter's counsel, District's counsel, as well as any other specialized counsel fees incurred in connection with the borrowing); financial advisor fees of any financial advisor to the District incurred in connection with the issuance of the Bonds; rating agency fees; escrow agent and paying agent fees; accountant fees and other expenses related to issuance of the Bonds; printing costs (for the Bonds and of the preliminary and final official statement relating to the Bonds); and fees and expenses of the District incurred in connection with the issuance of the Bonds.

**"Credit Facility"** means any letter of credit, insurance policy, guaranty, surety bond, standby bond purchase agreement, line of credit, revolving credit agreement, or similar obligation, arrangement, or instrument issued by a bank, insurance company, or other financial institution which is used by the District to perform one or more of the following tasks: (i) enhancing the District's credit by assuring owners of any of the Bonds that Principal of and interest on such Bonds will be paid promptly when due; (ii) providing liquidity for the owners of Bonds through undertaking to cause Bonds to be bought from the owners thereof when submitted pursuant to an arrangement prescribed by a Series Ordinance; or (iii) remarketing any Bonds so submitted to the Credit Facility Provider (whether or not the same Credit Facility Provider is remarketing the Bonds). The term Credit Facility shall not include a Reserve Account Credit Facility.

**"Credit Facility Agreement"** means an agreement between the District and a Credit Facility Provider pursuant to which the Credit Facility Provider issues a Credit Facility and may include the promissory note or other instrument evidencing the District's obligations to a Credit Facility Provider pursuant to a Credit Facility Agreement. The term Credit Facility Agreement shall not include a Reserve Account Credit Facility Agreement.

**"Credit Facility Provider"** means any issuer of a Credit Facility then in effect for all or part of the Bonds. The term Credit Facility Provider shall not include any Reserve Account Credit Facility Provider. Whenever in the Bond Ordinance the consent of the Credit Facility Provider is required, such consent shall only be required from the Credit Facility Provider whose Credit Facility is issued with respect to the series of Bonds for which the consent is required.

**"Debt Service Requirement"** means the total Principal and interest coming due on Senior Bonds, or all Bonds, as applicable, whether at maturity or upon mandatory redemption, in any specified period; provided, however, that (i) Debt Service Requirement with respect to SRF Bonds shall mean the

net amount of Principal and interest coming due on such SRF Bonds after taking into account any so-called “SRF Subsidy” (i.e., the amount of anticipated investment earnings which will accrue on any reserve account relating to the SRF Bonds and which will reduce the debt service payments of the District with respect to such SRF Bonds), and (ii) Debt Service Requirement with respect to Bonds issued as “build America bonds” shall mean the net amount of Principal and interest coming due on such Bonds after taking into account the anticipated receipt of U.S. Treasury Interest Subsidy payments on such Bonds. If any Bonds Outstanding or proposed to be issued shall bear interest at a Variable Rate, the interest coming due in any specified future period shall be determined as if the Variable Rate in effect at all times during such future period equaled the average of the BMA Municipal Bond Index (formerly PSA Municipal Bond Index) for the prior 5 calendar years, or any successor index as certified by a Financial Advisor. With respect to any Bonds secured by a Credit Facility, Debt Service Requirement shall include (i) any upfront or periodic commission or commitment fee obligations with respect to such Credit Facility, (ii) the outstanding amount of any Reimbursement Obligation owed to the applicable Credit Facility Provider and interest thereon, (iii) any Additional Interest owed on Pledged Bonds to a Credit Facility Provider, and (iv) any remarketing agent fees. With respect to any Hedged Bonds, the interest on such Hedged Bonds during any Hedge Period and for so long as the provider of the related Hedge Agreement has not defaulted on its payment obligations thereunder shall be calculated by adding (x) the amount of interest payable by the District on such Hedged Bonds pursuant to their terms and (y) the amount of Hedge Payments payable by the District under the related Hedge Agreement and subtracting (z) the amount of Hedge Receipts payable by the provider of the related Hedge Agreement at the rate specified in the related Hedge Agreement; provided, however, that to the extent that the provider of any Hedge Agreement is in default thereunder, the amount of interest payable by the District on the related Hedged Bonds shall be the interest calculated as if such Hedge Agreement had not been executed. In determining the amount of Hedge Payments or Hedge Receipts payable or receivable for any future period which are not fixed throughout the Hedge Period (i.e., which are variable), such Hedge Payments or Hedge Receipts for any period of calculation (the “Determination Period”) shall be computed by assuming that the variables comprising the calculation (e.g., indices) applicable to the Determination Period are equal to the average of the actual variables which were in effect (weighted according to the length of the period during which each such variable was in effect) for the most recent twelve-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a twelve-month period). The Principal of and interest on Bonds and Hedge Payments shall be excluded from the determination of Debt Service Requirement to the extent that (1) the same were or are expected to be paid with amounts on deposit on the date of calculation (or Bond proceeds to be deposited on the date of issuance of proposed Bonds) in the Project Fund, the Sinking Fund or a similar fund for Subordinate Bonds or (2) cash or non-callable Government Securities are on deposit in an irrevocable escrow or trust account in accordance with the provisions of the Bond Ordinance (or a similar escrow or trust account for Subordinate Bonds) and such amounts (including, where appropriate, the earnings or other increment to accrue thereon) are required to be applied to pay Principal or interest and are sufficient to pay such Principal or interest.

**“Debt Service Reserve Account”** means the account by that name within the Sinking Fund established in the Bond Ordinance.

**“Debt Service Reserve Requirement”** means an amount determined from time to time by the District as a reasonable reserve for the payment of Principal of and interest on Senior Bonds which are not Senior SRF Bonds or Senior Uncovered Bonds. On the date of issue of a series of Senior Bonds, this amount shall be the least of (a) 10% of the stated Outstanding Principal amount of the Senior Bonds which are not Senior SRF Bonds or Senior Uncovered Bonds, (b) the maximum annual Principal and interest requirements (taking into account the anticipated receipt of U.S. Treasury Interest Subsidy payments on the Series 2010B Bonds) on the Senior Bonds which are not Senior SRF Bonds or Senior Uncovered Bonds (determined as of the issue date of each series of Senior Bonds which are not Senior

SRF Bonds or Senior Uncovered Bonds), or (c) 125% of the average annual Principal and interest requirements (taking into account the anticipated receipt of U.S. Treasury Interest Subsidy payments on the Series 2010B Bonds) on the Senior Bonds which are not Senior SRF Bonds or Senior Uncovered Bonds (determined as of the issue date of each series of Senior Bonds which are not Senior SRF Bonds or Senior Uncovered Bonds). The District may in its sole discretion change, reduce or increase this amount from time to time by Supplemental Ordinance, but in no event may the District reduce this amount (A) below the greater of (1) while the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds or the Series 2013B Bonds are Outstanding, the least of (x) the aggregate of 10% of the stated Outstanding Principal amounts of the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds and the Series 2013B Bonds, (y) the aggregate of the maximum annual Principal and interest requirements on the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds and the Series 2013B Bonds (taking into account the anticipated receipt of U.S. Treasury Interest Subsidy payments on the Series 2010B Bonds) (determined as of their respective issue dates), or (z) the aggregate of 125% of the average annual Principal and interest requirements on the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds and the Series 2013B Bonds (taking into account the anticipated receipt of U.S. Treasury Interest Subsidy payments on the Series 2010B Bonds) (determined as of their respective issue dates), or (2) 50% of the average annual Debt Service Requirement with respect to Senior Bonds (other than Senior SRF Bonds and Senior Uncovered Bonds) in the then current or any succeeding Fiscal Year, and (B) unless each Rating Agency indicates in writing to the District that such reduction will not, by itself, result in a reduction or withdrawal of its current Rating on the Senior Bonds. If the aggregate initial offering price of a series of Bonds to the public is less than 98% or more than 102% of par, such offering price shall be used in lieu of the stated Principal amount. Notwithstanding anything in the Bond Ordinance to the contrary, (1) when all or a portion (the **“Refunding Portion”**) of a series of Senior Bonds is issued to refund a portion of a series of Outstanding Senior Bonds (the **“Refunded Series”**), the annual Principal and interest requirements to be used for purposes of clauses (b), (c), (A)(1)(y) and (A)(1)(z) above shall not include both the Principal and interest requirements of the Refunding Portion and the Refunded Series, but instead shall be, as between the Refunding Portion and the Refunded Series, the one that, when added to the Principal and interest requirements for all other Senior Bonds included in such computation, results in the greatest aggregate amount; (2) in no event shall the deposit to the Debt Service Reserve Requirement for each series of Senior Bonds exceed an amount permitted for a reasonably required reserve fund under the Code; and (3) the Debt Service Reserve Requirement, if any, in connection with any Senior SRF Bonds or any Subordinate Bonds, including Subordinate SRF Bonds, shall be as provided in the Series Ordinance authorizing the issuance of such Senior SRF Bonds or such Subordinate Bonds.

**“Depository”** means the depository of each fund established under the Bond Ordinance, and any successor depository of such fund hereafter designated by the District from time to time by Supplemental Ordinance. The Depository for the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds and the Series 2017A Bonds is U.S. Bank, N.A., St. Louis, Missouri.

**“District”** means The Metropolitan St. Louis Sewer District, a body corporate, a municipal corporation and a political subdivision duly created and existing under the laws of the State, and any successor thereto.

**“DTC”** means The Depository Trust Company, New York, New York, or its nominee, or its successors and assigns, or any other depository performing similar functions under the Bond Ordinance.

**“Escrow Agent”** means The Bank of New York Mellon Trust Company, N.A., St. Louis, Missouri, and any successors or assigns.

**“Escrow Agreement”** means the Escrow Trust Agreement dated as of December 1, 2017 between the District and the Escrow Agent, in substantially the form attached as an exhibit to the Bond Ordinance.

**“Escrow Fund”** means the fund by that name established pursuant to the Escrow Agreement.

**“Escrowed Securities”** means the securities described in the Escrow Agreement which will be delivered to and deposited in the Escrow Fund.

**“Event of Default”** means any of the events defined as such in the Bond Ordinance.

**“Expenses of Operation and Maintenance”** means all expenses reasonably incurred in connection with the operation, maintenance and repair of the System, including salaries, wages, the cost of materials and supplies, rentals of leased property, if any, management fees, payments to others for the treatment and disposal of sewage, the cost of audits and periodic Consultant’s reports, Paying Agent’s and Bond Registrar’s fees and expenses, payment of premiums for insurance required by the Bond Ordinance and other insurance which the District deems prudent to carry on the System and its operations and personnel, obligations (other than for borrowed money or for rents payable under capital leases) incurred in the ordinary course of business, liabilities incurred by endorsement for collection or deposit of checks or drafts received in the ordinary course of business, short-term obligations incurred and payable within a particular Fiscal Year, other obligations or indebtedness incurred for the purpose of leasing (pursuant to a true or operating lease) equipment, fixtures, inventory or other personal property, and, generally, all expenses, exclusive of interest on the Bonds and depreciation or amortization, which under accounting principles generally accepted for municipal utility purposes are properly allocable to operation and maintenance; however, only such expenses as are reasonable and necessary or desirable for the proper operation and maintenance of the System shall be included. “Expenses of Operation and Maintenance” also includes the District’s obligations under any contract with any other political subdivision or public agency or authority of one or more political subdivisions pursuant to which the District undertakes to make payments measured by the expenses of operating and maintaining any facility which constitutes part of the System and which is owned or operated in part by the District and in part by others.

**“Financial Advisor”** means an investment banking or financial advisory firm, commercial bank, or any other Person who or which is appointed by the District for the purpose of passing on questions relating to the availability and terms of specified types of Bonds and is actively engaged in and, in the good faith opinion of the District, has a favorable reputation for skill and experience in underwriting or providing financial advisory services in respect of similar types of securities.

**“Fiscal Year”** means the 12-month period used by the District for its general accounting purposes, as it may be changed from time to time. The Fiscal Year at the time the Bond Ordinance was adopted begins on July 1 and ends on June 30 of the immediately following calendar year.

**“Fitch”** means Fitch, Inc. or, if such corporation is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the District. At the time the Bond Ordinance was adopted, the notice address of Fitch is One State Street Plaza, New York, New York 10004.

**“Forecast Period”** means a period of three consecutive Fiscal Years commencing with the Fiscal Year in which any proposed Senior Bonds are to be issued.

**“Governing Body”** means the Board of Trustees of the District and any predecessor or successor in office to such present body, and any Person to whom or which may hereafter be delegated by law the



duties, powers, authority, obligations, or liabilities of the present body, either in whole or in relation to the System.

**“Government Loans”** means loans to the District by the government of the United States or the State, or by any department, authority or agency of either, for the purpose of acquiring, constructing, reconstructing, improving, bettering or extending any part of the System.

**“Government Obligations”** means (a) direct obligations of the United States of America for the full and timely payment of which the full faith and credit of the United States of America is pledged or (b) obligations issued by a person controlled or supervised by and acting as an instrumentality of the United States of America, the full and timely payment of the principal of and the interest on which is fully and unconditionally guaranteed as a full faith and credit obligation of the United States of America (including any securities described in (a) or (b) issued or held in book-entry form on the books of the Department of the Treasury of the United States of America), which obligations, in either case, (i) are not subject to redemption or prepayment prior to maturity except at the option of the holder of such obligations and (ii) may include U.S. Treasury Trust Receipts.

**“Hedge Agreement”** means, without limitation, (i) any contract provided by a Qualified Hedge Provider known as or referred to or which performs the function of an interest rate swap agreement, currency swap agreement, forward payment conversion agreement, or futures contract; (ii) any contract provided by a Qualified Hedge Provider providing for payments based on levels of, or changes or differences in, interest rates, currency exchange rates, or stock or other indices; (iii) any contract provided by a Qualified Hedge Provider to exchange cash flows or payments or series of payments; (iv) any type of contract provided by a Qualified Hedge Provider called, or designed to perform the function of, interest rate floors, collars, or caps, options, puts, or calls, to hedge or minimize any type of financial risk, including, without limitation, payment, currency, rate, or other financial risk; and (v) any other type of contract or arrangement provided by a Qualified Hedge Provider that the District determines is to be used, or is intended to be used, to manage or reduce the cost of any Bonds, to convert any element of any Bonds from one form to another, to maximize or increase investment return, to minimize investment return risk, or to protect against any type of financial risk or uncertainty.

**“Hedge Contingency Payments”** means amounts payable by the District pursuant to any Hedge Agreement as termination payments, fees, expenses and indemnity payments.

**“Hedge Payments”** means amounts payable by the District pursuant to any Hedge Agreement, other than Hedge Contingency Payments.

**“Hedge Period”** means the period during which a Hedge Agreement is in effect.

**“Hedge Receipts”** means amounts payable by any provider of a Hedge Agreement pursuant to such Hedge Agreement, other than termination payments, fees, expenses and indemnity payments.

**“Hedged Bonds”** means any Bonds for which the District shall have entered into a Hedge Agreement.

**“Independent Certified Public Accountant”** means a certified public accountant, or a firm of certified public accountants, who or which is “independent” as that term is defined in Rule 101 and related interpretations of the Code of Professional Ethics of the American Institute of Certified Public Accountants, of recognized standing, who or which does not devote his or its full time to the District (but who or which may be regularly retained by the District).

**“Interest Payment Date”** means each date on which interest is to become due on any Bonds, as established in the Series Ordinance for such Bonds, and with respect to the Series 2017A Bonds, shall be as specified in the Bond Ordinance.

**“Investment Earnings”** means all interest received on and profits derived from investments of moneys in all funds and accounts of the District other than investments derived from or with respect to (a) stormwater revenues, (b) all funds and accounts established in connection with SRF Bonds and (c) obligations issued by the District on behalf of any of its subdistricts.

**“Maximum Annual Debt Service”** means the maximum amount of Debt Service Requirements as computed for the then current or any future Fiscal Year.

**“Moody’s”** means Moody’s Investors Service, Inc. or, if such corporation is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the District. At the time the Bond Ordinance was adopted, the notice address of Moody’s is 99 Church Street, New York, New York 10007.

**“Net Operating Revenues”** means Operating Revenues, after provision for payment of all Expenses of Operation and Maintenance.

**“Operating Revenues”** means all income and revenue of any nature derived from the operation of the System, including periodic wastewater billings, service charges, other charges for wastewater service and the availability thereof (other than any special assessment proceeds), connection or tap fees (whether accounted for as revenues or as contributed capital), net proceeds from business interruption insurance, the principal of gifts, bequests, contributions, grants and donations available to pay debt service of Bonds, and any amounts deposited in escrow in connection with the acquisition, construction, remodeling, renovation and equipping of facilities to be applied during the period of determination to pay interest on Bonds, but excluding (a) any profits or losses on the early extinguishment of debt or on the sale or other disposition, not in the ordinary course of business, of investments or fixed or capital assets, and local, state or federal grants or other moneys received for the payment of Expenses of Operation and Maintenance, (b) local, state, or federal grants, loans (including Government Loans), capital improvement contract payments, or other moneys received for capital improvements to the System, (c) Investment Earnings, (d) any stormwater charges and (e) any property tax revenues.

**“Other System Obligations”** means obligations of any kind, including but not limited to, Government Loans, general obligation bonds, revenue bonds, capital leases, installment purchase agreements, or notes (but excluding Bonds and related obligations to Credit Facility Providers, Reserve Account Credit Facility Providers and Qualified Hedge Providers), incurred or issued by the District to finance or refinance the cost of acquiring, constructing, reconstructing, improving, equipping, bettering, or extending any part of the System.

**“Outstanding”** means, when used in reference to Bonds, all Bonds which have been duly authenticated and delivered under the Bond Ordinance, with the exception of (a) Bonds in lieu of which other Bonds have been issued under agreement to replace lost, mutilated, stolen, or destroyed obligations, (b) Bonds surrendered by the owners in exchange for other Bonds under the Bond Ordinance, and (c) Bonds for the payment of which provision has been made in accordance with the Bond Ordinance.

**“Paying Agent”** means any bank or trust company, including any successors and assigns thereof, authorized by the District in the Bond Ordinance to pay the Principal of, premium, if any, or interest on any Bonds on behalf of the District. Such Paying Agent shall perform the duties required of the Paying

Agent in the Bond Ordinance. The Bank of New York Mellon Trust Company, N.A. is designated as Paying Agent for the Series 2017A Bonds.

**“Payments Account”** means the account by that name within the Sinking Fund established in the Bond Ordinance.

**“Permitted Investments”** means obligations in which the District is permitted to invest moneys of the District pursuant to applicable law, which have (or are collateralized by obligations which have) a Rating by any Rating Agency which is equal to or greater than the third highest long-term Rating of such Rating Agency, or which bears (or are collateralized by obligations which bear) the second highest short-term Rating of such Rating Agency. As of the date of adoption of the Master Bond Ordinance, obligations in which the District is permitted to invest proceeds of Bonds are described in Section 7.020 of the Charter.

**“Person”** or **“person”** means any individual, corporation, partnership, limited liability company, joint venture, association, joint stock company, trust, unincorporated organization, body, authority, government, or agency or political subdivision thereof.

**“Pledged Bond”** means any Bond purchased and held by a Credit Facility Provider pursuant to a Credit Facility Agreement. A Bond shall be deemed a Pledged Bond only for the actual period during which such Bond is owned by a Credit Facility Provider pursuant to a Credit Facility Agreement.

**“Pledged Bond Rate”** means the rate of interest payable on Pledged Bonds, as may be provided in a Credit Facility or Credit Facility Agreement.

**“Pledged Revenues”** means Net Operating Revenues, Investment Earnings, Hedge Receipts, and all moneys paid or required to be paid into, and all moneys and securities on deposit from time to time in, the funds and accounts specified in the Bond Ordinance, but excluding any amounts required in the Bond Ordinance to be set aside pending, or used for, rebate to the United States government pursuant to Section 148(f) of the Code, including, but not limited to, amounts in the Rebate Fund.

**“Principal”** means, with respect to a Current Interest Bond, the principal amount of such Bond.

**“Principal Maturity Date”** means each date on which Principal is to become due on any Bonds, by maturity or mandatory sinking fund redemption, as established in the Series Ordinance for such Bonds.

**“Project”** means the acquisition, construction, reconstruction, improvement, betterment, extension or equipping of the System, in whole or in part, with the proceeds of a series of Bonds, including, but not limited to, the Series 2017A Project.

**“Project Fund”** means the fund by that name established in the Bond Ordinance.

**“Purchase Contract”** means, with respect to the Series 2017A Bonds, the Purchase Contract between the District and the Underwriter of the Series 2017A Bonds and, with respect to any additional Bonds, the Purchase Contract between the District and the Underwriter relating to such series of Bonds.

**“Qualified Hedge Provider”** means an entity whose senior unsecured long term obligations, financial program rating, counterparty rating, or claims paying ability, or whose payment obligations under the related Hedge Agreement are absolutely and unconditionally guaranteed by an entity whose senior unsecured long term obligations, financial program rating, counterparty rating, or claims paying ability, are rated either (i) at least as high as the third highest Rating of each Rating Agency, but in no

event lower than any Rating on the related Hedged Bonds at the time of execution of the Hedge Agreement, or (ii) in any such lower Rating which each Rating Agency indicates in writing to the District will not, by itself, result in a reduction or withdrawal of its Rating on the related Hedged Bonds that is in effect prior to entering into the Hedge Agreement. An entity's status as a "Qualified Hedge Provider" is determined only at the time the District enters into a Hedge Agreement with such entity and shall not be redetermined with respect to that Hedge Agreement.

**"Rating"** means a rating in one of the categories by a Rating Agency, disregarding pluses, minuses, and numerical gradations.

**"Rating Agencies"** or **"Rating Agency"** means Fitch, Moody's, and S&P or any successors thereto and any other nationally recognized credit rating agency then maintaining a rating on any Bonds at the request of the District. If at any time a particular Rating Agency does not have a rating outstanding with respect to the relevant Bonds, then a reference to Rating Agency or Rating Agencies shall not include such Rating Agency.

**"Rebate Fund"** means the fund by that name established in the Bond Ordinance.

**"Record Date"** means, with respect to any semiannual Interest Payment Date, the 15th day of the calendar month immediately preceding such Interest Payment Date, and any record dates designated by the District in a Series Ordinance.

**"Refunded Bonds"** means, collectively, those certain maturities of the Series 2011B Bonds, the Series 2012A Bonds, the Series 2013B Bonds and the Series 2015B Bonds, being refunded with a portion of the proceeds of the Series 2017A Bonds.

**"Reimbursement Obligation"** means the obligation of the District to directly reimburse any Credit Facility Provider for amounts paid by such Credit Facility Provider under a Credit Facility, whether or not such obligation to so reimburse is evidenced by a promissory note or other similar instrument.

**"Renewal and Extension Fund"** means the fund by that name established in the Bond Ordinance.

**"Replenishment Payments"** shall have the meaning ascribed therefor in under the caption "Sinking Fund – Debt Service Reserve Account" in this **Appendix C**.

**"Reserve Account Credit Facility"** means any letter of credit, insurance policy, line of credit, or surety bond, together with any substitute or replacement therefor, if any, complying with the provisions of the Bond Ordinance, thereby fulfilling all or a portion of the Debt Service Reserve Requirement.

**"Reserve Account Credit Facility Agreement"** means any agreement between the District and a Reserve Account Facility Provider relating to the issuance of a Reserve Account Credit Facility, as such agreement may be amended from time to time.

**"Reserve Account Credit Facility Provider"** means any provider of a Reserve Account Credit Facility.

**"Revenue Fund"** means the fund by that name established in the Bond Ordinance.

**“Senior Bonds”** means the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds, the Series 2017A Bonds and any Bonds, including Senior SRF Bonds and Senior Uncovered Bonds, issued with a right to payment and secured by a lien on a parity with the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds and the Series 2017A Bonds (except with respect to any Credit Facility which may be available only to one or more series of Senior Bonds and except that Senior SRF Bonds and Senior Uncovered Bonds shall not be secured by the Debt Service Reserve Account) pursuant to the Bond Ordinance.

**“Senior Hedge Agreements”** means Hedge Agreements relating to Hedged Bonds which are Senior Bonds.

**“Senior SRF Bonds”** means SRF Bonds which are Senior Bonds.

**“Senior Uncovered Bonds”** means all series of Senior Bonds, other than Senior SRF Bonds, with respect to which the District has specified pursuant to a Series Ordinance authorizing such series of Senior Bonds that such series of Senior Bonds will not be secured by the Debt Service Reserve Account.

**“Series 2017A Bonds”** means the District’s Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A, in the original aggregate Principal amount of \$316,175,000 authorized under the Bond Ordinance.

**“Series 2017A Costs of Issuance Account”** means the account by that name within the Project Fund established in the Bond Ordinance.

**“Series 2017A Project”** means the project as particularly described in plans and specifications on file from time to time with the District.

**“Series 2017A Project Account”** means the account by that name within the Project Fund established in the Bond Ordinance

**“Series 2017A Rebate Account”** means the account by that name within the Rebate Fund established in the Bond Ordinance.

**“Series Ordinance”** means a bond ordinance or bond ordinances of the District (which may be supplemented by one or more bond ordinances) to be adopted prior to and authorizing the issuance and delivery of any series of Bonds. The Master Bond Ordinance shall constitute a Master Bond Ordinance for Senior Bonds and Subordinate Bonds. Such a bond ordinance as supplemented shall establish the date or dates of the pertinent series of Bonds, the schedule of maturities of such Bonds, whether any such Bonds will be capital appreciation bonds, the name of the purchaser(s) of such series of Bonds, the purchase price thereof, the rate or rates of interest to be borne thereby, whether fixed or variable, the interest payment dates for such Bonds, the terms and conditions, if any, under which such Bonds may be made subject to redemption (mandatory or optional) prior to maturity, the form of such Bonds, and such other details as the District may determine.

**“Sinking Fund”** means the fund by that name established in the Bond Ordinance.

**“SRF Bonds”** means such Bonds or other obligations issued in connection with the District’s participation in the Missouri State Revolving Fund Program of the Missouri Department of Natural

Resources and the State Environmental Improvement and Energy Resources Authority, which SRF Bonds may be Senior SRF Bonds or Subordinate SRF Bonds.

**“Standard and Poor’s” or “S&P”** means S&P Global Ratings, a division of S&P Global Inc., or, if such corporation is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the District. At the time the Master Bond Ordinance was adopted, the notice address of S&P is 25 Broadway, New York, New York 10004.

**“State”** means the State of Missouri.

**“Subordinate Bonds”** means Bonds, including Subordinate SRF Bonds, issued with a right to payment from the Pledged Revenues and secured by a lien on the Pledged Revenues expressly junior and subordinate to the Senior Bonds.

**“Subordinate Hedge Agreements”** means Hedge Agreements relating to Hedged Bonds which are Subordinate Bonds.

**“Subordinate SRF Bonds”** means SRF Bonds which are Subordinate Bonds.

**“Supplemental Ordinance”** means (a) any Series Ordinance and (b) any modification, amendment, or supplement to the Master Bond Ordinance other than a Series Ordinance.

**“System”** means the sanitary sewer system of the District, as it now exists and as it may be hereafter added to, extended, improved and equipped, either from the proceeds of the Bonds or from any other sources at any time hereafter, including, without limitation, (a) all sanitary sewers, all combined sewers, all pumping stations, all wastewater treatment plants, and all equipment used in connection therewith, all facilities for the collection, treatment and disposal of sewage and wastewater, including industrial wastes, and (b) all other facilities or property of any nature or description, real or personal, tangible or intangible, now or hereafter owned or used by the District in the collection, treatment and disposal of sewage. The District may own a partial interest in any sanitary sewer facility, the remaining interest in which may be owned by or on behalf of a political subdivision of the State or any agency or authority thereof. In case of such ownership, the rights and interests possessed by the District in such facility shall be included as part of the System.

**“Tax-Exempt Bonds”** means any Bonds the interest on which has been determined, in an opinion of Bond Counsel, to be excludable from the gross income of the owners thereof for federal income tax purposes.

**“Underwriter”** means (i) with respect to the Series 2017A Bonds, Barclays Capital Inc., as representative of the original purchasers of the Series 2017A Bonds, and (ii) with respect to any additional series of Bonds, the underwriter(s) specified in the Series Ordinance authorizing such series of Bonds.

**“U.S. Treasury Trust Receipts”** means receipts or certificates which evidence an undivided ownership interest in the right to the payment of portions of the principal of or interest on obligations described in clauses (a) or (b) of the term Government Obligations, provided that such obligations are held by a bank or trust company organized under the laws of the United States acting as custodian of such obligations, in a special account separate from the general assets of such custodian.

**“U.S. Treasury Interest Subsidy”** means any interest subsidy paid by the United States Treasury to the District.

**“Variable Rate”** means a rate of interest applicable to Bonds, other than a fixed rate of interest which applies to a particular maturity of Bonds, so long as that maturity of Bonds remains Outstanding.

## **FUNDS AND ACCOUNTS**

The District establishes or ratifies the establishment of the following funds and accounts, and the moneys deposited in such funds and accounts shall be held in trust for the purposes set forth in the Bond Ordinance:

(a) The Metropolitan St. Louis Sewer District Wastewater Revenue Fund (the **“Revenue Fund”**), to be held by the Depository for the account of the District.

(b) The Metropolitan St. Louis Sewer District Wastewater Sinking Fund (the **“Sinking Fund”**), to be held by the Depository for the account of the District, and within said Sinking Fund a Payments Account and a Debt Service Reserve Account.

(c) The Metropolitan St. Louis Sewer District Wastewater Renewal and Extension Fund (the **“Renewal and Extension Fund”**), to be held by the Depository for the account of the District.

(d) The Metropolitan St. Louis Sewer District Wastewater Rebate Fund (the **“Rebate Fund”**), to be held by the Depository for the account of the District, and within said Rebate Fund a Series 2017A Rebate Account.

(e) The Metropolitan St. Louis Sewer District Wastewater Project Fund (the **“Project Fund”**), to be held by the Depository for the account of the District, and within said Project Fund a Series 2017A Project Account and a Series 2017A Costs of Issuance Account.

Each account listed above shall be held within the fund under which it is created. The District reserves the right, in its sole discretion, to create additional subaccounts or to abolish any subaccounts within any account from time to time.

In addition to the funds described above, the Escrow Agreement establishes the Escrow Fund to be held and administered by the Escrow Agent in accordance with the provisions of the Escrow Agreement.

### **Revenue Fund**

The District shall deposit and continue to deposit all Operating Revenues in the Revenue Fund from time to time as and when received. Moneys in the Revenue Fund shall be applied by the District from time to time to the following purposes and, prior to the occurrence and continuation of an Event of Default, in the following order of priority: (1) to pay Expenses of Operation and Maintenance, (2) to deposit into the Sinking Fund the amounts required by the Bond Ordinance and described below under the caption **“FUNDS AND ACCOUNTS – Sinking Fund,”** (3) to make Replenishment Payments to the Debt Service Reserve Account and to pay to any Credit Facility Provider any amounts due under a Credit Facility Agreement, including Additional Interest, in accordance with the Bond Ordinance and described

below under the caption **“FUNDS AND ACCOUNTS – Sinking Fund – Debt Service Reserve Account,”** (4) to deposit into the Rebate Fund the amounts required by the Bond Ordinance, (5) to pay any amounts due any Reserve Account Credit Facility Provider pursuant to the Reserve Account Credit Facility Agreement, (6) to deposit the amounts required to be deposited into the funds and accounts created by any Series Ordinance authorizing the issuance of Subordinate Bonds, for the purpose of paying Principal of (whether at maturity, upon mandatory redemption or as otherwise required by a Series Ordinance relating to Subordinate SRF Bonds) and interest on Subordinate Bonds, making Hedge Contingency Payments under Senior Hedge Agreements, making Contingency Payments under Senior Hedge Agreements, making Hedge Payments and making Hedge Contingency Payments under Subordinate Hedge Agreements, and accumulating reserves for such payments, (7) to make Accumulation Payments to the Debt Service Reserve Account in accordance with the Bond Ordinance and described below under the caption **“FUNDS AND ACCOUNTS – Sinking Fund – Debt Service Reserve Account,”** and (8) to pay any amounts required to be paid with respect to any Other System Obligations.

In addition to, and after, the deposits described above, the District may from time to time deposit into the Renewal and Extension Fund any moneys and securities held in the Revenue Fund in excess of 45 days' estimated Expenses of Operation and Maintenance.

Any money withdrawn from the funds and accounts described in clause (6) above relating to Subordinate Bonds for use in making payments described in said clause (6) shall be released from the lien of the Bond Ordinance. If at any time the amounts in any account of the Sinking Fund are less than the amounts required by the Bond Ordinance, and there are not on deposit in the Renewal and Extension Fund available moneys sufficient to cure any such deficiency, then the District shall withdraw from the funds and accounts of the District relating to Subordinate Bonds and deposit in such account of the Sinking Fund, as the case may be, the amount necessary (or all the moneys in such funds and accounts, if less than the amount required) to make up such deficiency.

### **Sinking Fund**

*Payments Account-General.* Sufficient moneys shall be paid in periodic installments from the Revenue Fund into the Payments Account for the purpose of paying the Principal of and interest (excluding Additional Interest) on the Senior Bonds as they become due and payable and for the purpose of making Hedge Payments under Senior Hedge Agreements. Amounts held in the Payments Account shall be used solely to pay interest (excluding Additional Interest) and Principal of the Senior Bonds as the same become due and payable (whether at maturity or upon redemption) and to pay Hedge Payments under Senior Hedge Agreements when due. Amounts held in the Payments Account shall not be used to pay Additional Interest.

*Interest.* Except as otherwise provided in any Series Ordinance authorizing Senior SRF Bonds, on or before the 30th day preceding each Interest Payment Date for Senior Bonds (or, in the case of Senior Bonds bearing interest at a Variable Rate, on or before the Business Day preceding each Interest Payment Date), the District shall deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment and, in the case of Senior SRF Bonds, anticipated investment earnings on reserve funds held by a bond trustee relating to such Senior SRF Bonds, is not less than the interest (excluding Additional Interest) coming due on such Senior Bonds on such Interest Payment Date. The District shall also deposit and continue to deposit all Hedge Receipts under Senior Hedge Agreements in the Payments Account from time to time as and when received.

*Principal.* Except as otherwise provided in any Series Ordinance authorizing Senior SRF Bonds, on or before the 30th day preceding each Principal Maturity Date for Senior Bonds, the District shall



deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than the Principal coming due on such Senior Bonds on such Principal Maturity Date.

*Hedge Payments.* On or before the 30th day preceding each payment date for Hedge Payments under Senior Hedge Agreements, the District shall deposit in the Payments Account an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than such Hedge Payments coming due on such payment date.

*Application of Moneys in Payments Account.* No further payments need be made into the Payments Account whenever the amount available in the Payments Account, if added to the amount then in the Debt Service Reserve Account (without taking into account any amount available to be drawn on any Reserve Account Credit Facility), is sufficient to retire all Senior Bonds then Outstanding and to pay all unpaid interest accrued and to accrue prior to such retirement. No moneys in the Payments Account shall be used or applied to the optional purchase or redemption of Senior Bonds prior to maturity unless: (i) provision shall have been made for the payment of all of the Senior Bonds; or (ii) such moneys are applied to the purchase and cancellation of Senior Bonds which are subject to mandatory redemption on the next mandatory redemption date, which falls due within 12 months, such Senior Bonds are purchased at a price not more than would be required for mandatory redemption, and such Senior Bonds are cancelled upon purchase; or (iii) such moneys are applied to the purchase and cancellation of Senior Bonds at a price less than the amount of Principal which would be payable on such Senior Bonds, together with interest accrued through the date of purchase, and such Senior Bonds are cancelled upon purchase; or (iv) such moneys are in excess of the then required balance of the Payments Account and are applied to redeem a part of the Senior Bonds Outstanding on the next succeeding redemption date for which the required notice of redemption may be given.

*Debt Service Reserve Account.* With respect to Senior Bonds which are not Senior Uncovered Bonds, there shall be deposited into the Debt Service Reserve Account the amounts specified in Series Ordinances with respect to Senior Bonds. Notwithstanding the foregoing, there shall be no deposit into the Debt Service Reserve Account with respect to any SRF Bonds or Senior Uncovered Bonds nor shall the Debt Service Reserve Account secure any SRF Bonds or Senior Uncovered Bonds. After the issuance of any Senior Bonds, the increase in the amount of the Debt Service Reserve Requirement resulting from the issuance of such Senior Bonds shall be accumulated, to the extent not covered by deposits from Bond proceeds or funds on hand, over a period not exceeding 61 months from the date of delivery of such Senior Bonds in monthly deposits (“**Accumulation Payments**”), none of which is less than 1/60 of the amount to be accumulated. The balance of the Debt Service Reserve Account shall be maintained at an amount equal to the Debt Service Reserve Requirement (or such lesser amount that is required to be accumulated in the Debt Service Reserve Account in connection with the periodic accumulation to the Debt Service Reserve Requirement after the issuance of Senior Bonds or upon the failure of the District to provide a substitute Reserve Account Credit Facility in certain events). There shall be transferred from the Revenue Fund on a pro rata basis (1) to the Debt Service Reserve Account the amount necessary to restore, as further described below, the amount of cash and securities in the Debt Service Reserve Account to an amount equal to the difference between (a) the Debt Service Reserve Requirement (or such lesser monthly amount that is required to be deposited into the Debt Service Reserve Account after the issuance of Senior Bonds or upon the failure of the District to provide a substitute Reserve Account Credit Facility in certain events) and (b) the portion of the required balance of the Debt Service Reserve Account satisfied by means of a Reserve Account Credit Facility, and (2) to any Reserve Account Credit Facility Provider the amount necessary to reinstate any Reserve Account Credit Facility which has been drawn down. Whenever for any reason the amount in the Payments Account is insufficient to pay all interest or Principal becoming due on the Senior Bonds within the next seven days (or, in the case of Senior Bonds bearing interest at a Variable Rate, on the next Business Day), the District shall make up

any deficiency by transfers first from the Renewal and Extension Fund and second from the funds and accounts of the District relating to Subordinate Bonds which are not Subordinate SRF Bonds. Whenever, on the date that such interest or Principal is due, there are insufficient moneys in the Payments Account available to make such payment, the District shall, without further instructions, apply so much as may be needed of the moneys in the Debt Service Reserve Account to prevent default in the payment of such interest or Principal, with priority to interest payments. Whenever by reason of any such application or otherwise (other than required Accumulation Payments), the amount remaining to the credit of the Debt Service Reserve Account is less than the amount then required to be in the Debt Service Reserve Account, such deficiency shall be remedied by monthly deposits ("**Replenishment Payments**") from the Revenue Fund, to the extent funds are available in the Revenue Fund for such purpose after all required transfers set forth above have been made.

The District may elect to satisfy in whole or in part the Debt Service Reserve Requirement by means of a Reserve Account Credit Facility, subject to the following requirements: (A) the Reserve Account Credit Facility Provider must have a credit rating issued by a Rating Agency not less than the then current Rating on the related series of Senior Bonds (or, in the case of a series of Senior Bonds supported by a Credit Facility, the underlying rating on such Senior Bonds); (B) the District shall not secure any obligation to the Reserve Account Credit Facility Provider by a lien equal to or superior to the lien granted to the related series of Senior Bonds; (C) each Reserve Account Credit Facility shall have a term of at least one (1) year (or, if less, the remaining term of the related series of Senior Bonds) and shall entitle the District to draw upon or demand payment and receive the amount so requested in immediately available funds on the date of such draw or demand; (D) the Reserve Account Credit Facility shall permit a drawing by the District for the full stated amount in the event (i) the Reserve Account Credit Facility expires or terminates for any reason prior to the final maturity of the related series of Senior Bonds, and (ii) the District fails to satisfy the Debt Service Reserve Requirement by the deposit to the Debt Service Reserve Account of cash, obligations, a substitute Reserve Account Credit Facility, or any combination thereof, on or before the date of such expiration or termination; (E) if the Rating issued by the Rating Agency to the Reserve Account Credit Facility Provider is withdrawn or reduced below the Rating assigned to the related series of Senior Bonds immediately prior to such action by the Rating Agency, the District shall provide a substitute Reserve Account Credit Facility within sixty (60) days after such rating change, and, if no substitute Reserve Account Credit Facility is obtained by such date, shall fund the Debt Service Reserve Requirement in not more than twenty-four (24) equal monthly deposits commencing not later than the first day of the month immediately succeeding the date representing the end of such sixty (60) day period; (F) if the Reserve Account Credit Facility Provider commences any insolvency proceedings or is determined to be insolvent or fails to make payments when due on its obligations, the District shall provide a substitute Reserve Account Credit Facility within sixty (60) days thereafter, and, if no substitute Reserve Account Credit Facility is obtained by such date, shall fund the Debt Service Reserve Requirement in not more than twenty-four (24) equal monthly deposits commencing not later than the first day of the month immediately succeeding the date representing the end of such sixty (60) day period; and (G) the prior written consent of the Credit Facility Provider, as to the provider and the structure of the Reserve Account Credit Facility, shall be obtained by the District. If the events described in either clauses (E) or (F) above occur, the District shall not relinquish the Reserve Account Credit Facility at issue until after the Debt Service Reserve Requirement is fully satisfied by the provision of cash, obligations, or a substitute Reserve Account Credit Facility or any combination thereof. Any amount received from the Reserve Account Credit Facility shall be deposited directly into the Payments Account, and such deposit shall constitute the application of amounts in the Debt Service Reserve Account. Repayment of any draw-down on the Reserve Account Credit Facility (other than repayments which reinstate the Reserve Account Credit Facility) and any interest or fees due the Reserve Account Credit Facility Provider under such Reserve Account Credit Facility shall be secured by a lien on the Pledged Revenues subordinate to payments into the Sinking Fund and the Rebate Fund and payments to any Credit Facility Provider securing Senior Bonds.

Any such Reserve Account Credit Facility shall be pledged to the benefit of the owners of all of the Senior Bonds. The District reserves the right, if it deems it necessary in order to acquire such a Reserve Account Credit Facility, to amend the Bond Ordinance without the consent of any of the owners of the Bonds in order to grant to the Reserve Account Credit Facility Provider such additional rights as it may demand, provided that such amendment shall not, in the written opinion of Bond Counsel filed with the District, impair or reduce the security granted to the owners of Senior Bonds or any of them.

**The Series 2017A Bonds are Senior Uncovered Bonds and therefore are not secured by the Debt Service Reserve Account.**

### **Renewal and Extension Fund**

In addition to the deposits to be made to the Renewal and Extension Fund pursuant to the Bond Ordinance, the District shall deposit in the Renewal and Extension Fund all termination payments received under any Hedge Agreements. All sums accumulated and retained in the Renewal and Extension Fund shall be used first to prevent default in the payment of interest on or Principal of the Senior Bonds when due and then shall be applied by the District from time to time, as and when the District shall determine, to the following purposes and, prior to the occurrence and continuation of an Event of Default, in the order of priority determined by the District in its sole discretion: (a) for the purposes for which moneys held in the Revenue Fund may be applied under the Bond Ordinance, (b) to pay any amounts which may then be due and owing under any Hedge Agreement (including termination payments, fees, expenses, and indemnity payments), (c) to pay any governmental charges and assessments against the System or any part thereof which may then be due and owing, (d) to make acquisitions, betterments, extensions, repairs, or replacements or other capital improvements (including the purchase of equipment) to the System deemed necessary by the District (including payments under contracts with vendors, suppliers, and contractors for the foregoing purposes), (e) to acquire Senior Bonds by redemption or by purchase in the open market at a price not exceeding the callable price as provided and in accordance with the terms and conditions of the Bond Ordinance, which Senior Bonds may be any of the Senior Bonds, prior to their respective maturities, and when so used for such purposes the moneys shall be withdrawn from the Renewal and Extension Fund and deposited into the Payments Account for the Senior Bonds to be so redeemed or purchased and (f) for any other purpose of the District. Payments for the purposes set forth in clause (e) of the preceding sentence are not "required payments" for purposes of the District's rate covenant set forth in the Bond Ordinance.

### **Rebate Fund**

The District shall calculate, from time to time, as required in order to comply with the provisions of Section 148(f) of the Code, the amounts required to be rebated (including penalties) to the United States and shall deposit or cause to be deposited into the Rebate Fund any and all of such amounts promptly following a determination of any such amount.

The District shall direct the Depository of the Rebate Fund to keep all moneys held therein invested in Permitted Investments. To the extent and at the times required in order to comply with Section 148(f) of the Code, the District may withdraw funds from the Rebate Fund for the purpose of making rebate payments (including penalties) to the United States as required by Section 148(f) of the Code. Except as otherwise specifically provided in the Bond Ordinance, moneys in the Rebate Fund may not be withdrawn from the Rebate Fund for any other purpose.

All earnings on investments held in the Rebate Fund shall be retained in the Rebate Fund and shall become part of the Rebate Fund. Moneys held in the Rebate Fund, including the Investment Earnings thereon, if any, shall not be subject to a pledge in favor of the owners of the Bonds under the

Bond Ordinance and may not be used to pay amounts due on the Bonds or under any Credit Facility Agreements or Hedge Agreements or amounts required for the operation, maintenance, enlargement, or extension of the System.

## **Project Fund**

The District shall establish within the Project Fund a separate account for each Project. Except as may be otherwise provided in the Series Ordinance authorizing the issuance of SRF Bonds, moneys in the Project Fund shall be held by the Depository, or such other bank as may from time to time be designated by the District, and applied to the payment of the Costs of the Project, or for the repayment of advances made for that purpose in accordance with and subject to the provisions and restrictions set forth in the Bond Ordinance. The District covenants that it will not cause or permit to be paid from the Project Fund any sums except in accordance with such provisions and restrictions; provided, however, that any moneys in the Project Fund not presently needed for the payment of current obligations during the course of construction may be invested in Permitted Investments maturing not later than (i) the date upon which such moneys will be needed according to a schedule of anticipated payments from the Project Fund filed with the District by the Consultant in charge of the Project or (ii) in the absence of such schedule, 36 months from the date of purchase, in either case upon written direction of the District. Any such investments shall be held by the Depository, in trust, for the account of the Project Fund until maturity or until sold, and at maturity or upon such sale the proceeds received therefrom including accrued interest and premium, if any, shall be immediately deposited by the Depository in the Project Fund and shall be disposed of in the manner and for the purposes provided in the Bond Ordinance.

At such time as the Depository is furnished with a certificate from the Chief Financial Officer stating that all Costs of Issuance have been paid, and in any case not later than 6 months after the date of issuance of the Series 2017A Bonds, the Depository shall transfer any money in the Series 2017A Costs of Issuance Account to the Series 2017A Project Account of the Project Fund.

Moneys in each separate account in the Project Fund shall be used for the payment or reimbursement of the Costs of the Project for which such account was established as provided in the Bond Ordinance.

All payments from the Project Fund shall be made upon draft except as provided in the Bond Ordinance, signed by an officer of the District properly authorized to sign on its behalf, but before such officer shall sign any such draft, there shall be filed with the Depository a requisition for such payment, in substantially the form attached as an exhibit to the Bond Ordinance, stating each amount to be paid and the name of the person to whom payment is due, and certifying:

- (a) That an obligation in the stated amount has been incurred by the District and that the same is a proper charge against the Project Fund and has not been paid and stating that the bill or statement of account for such obligation, or a copy thereof, is on file in the office of the District;
- (b) That the signer has no notice of any vendor's, mechanic's, or other liens or rights to liens, chattel mortgages, or conditional sales contracts which should be satisfied or discharged before such payment is made; and
- (c) That such requisition contains no item representing payment on account of any retained percentages which the District is, at the date of any such certificate, entitled to retain.

In the event the United States government or government of the State, or any department, authority, or agency of either, agrees to allocate moneys to be used to defray any part of the Cost of any Project upon the condition that the District appropriate a designated amount of moneys for such purpose, and it is required of the District that its share of such cost be deposited in a special account, the District shall have the right to withdraw any sum so required from the Project Fund by appropriate transfer and deposit the same in a special account for that particular Project; provided, however, that all payments thereafter made from such special account shall be made only in accordance with the requirements set forth in the Bond Ordinance.

Withdrawals for investment purposes only may be made by the Depository to comply with written directions from the District without any requisition other than such direction.

For each series of Bonds, the District shall, when a Project has been completed, and may, when a Project has been substantially completed, file with the Depository a certificate signed by the Chief Financial Officer estimating what portion of the funds remaining in the separate account relating to such Project will be required by the District for the payment or reimbursement of the Costs of such Project. The Chief Financial Officer shall attach to his or her certificate a certificate of the supervising engineer certifying that such Project has been completed or substantially completed, as the case may be, in accordance with the plans and specifications therefor and approving the estimates of the Chief Financial Officer with respect to the portion of funds in the account required for Costs of the Project. Such funds that will not be used shall be (1) transferred to the Payments Account and used to redeem Bonds of the related series on the next redemption date or to pay Principal of such Bonds on the next Principal Maturity Date, or (2) transferred to the Payments Account and used to pay interest on Bonds of the related series, provided that the District shall first obtain an opinion of Bond Counsel to the effect that, under existing law, the application of such moneys to pay interest on such Bonds (a) is allowed under State law, and (b) if such Bonds are Tax-Exempt Bonds, will not, by itself and without more, adversely affect the exclusion from gross income for federal income tax purposes of interest payable on such Bonds. When all moneys have been withdrawn or transferred from any separate account within the Project Fund in accordance with the provisions of the Bond Ordinance, such separate account shall terminate and cease to exist.

## **DEPOSITS AND INVESTMENTS**

All moneys in the funds and accounts established under the Bond Ordinance, except those funds and accounts created by a Series Ordinance in connection with the issuance of SRF Bonds, shall be held by the District in one or more Depositories qualified for use by the District. Uninvested moneys shall, at least to the extent not guaranteed by the Federal Deposit Insurance Corporation, be secured to the fullest extent required by the laws of the State for the security of public funds.

Moneys in the funds and accounts established under the Bond Ordinance, except those funds and accounts created by a Series Ordinance in connection with the issuance of SRF Bonds, shall be invested and reinvested in Permitted Investments bearing interest at the highest rates reasonably available (except to the extent that a restricted yield is required or advisable under Section 148 of the Code) and containing such maturities as are deemed suitable by the District; provided, however, that without the prior written consent of the Credit Facility Provider, investments of moneys in the Debt Service Reserve Account shall not have maturities extending beyond five years. Investment of moneys in funds and accounts created by a Series Ordinance in connection with the issuance of SRF Bonds shall be as set forth in such Series Ordinance.

Investment Earnings in each fund and account (except the Debt Service Reserve Account) shall be retained therein. Investment Earnings from the investment of moneys in the Debt Service Reserve Account shall be retained in the Debt Service Reserve Account at all times the balance is less than the Debt Service Reserve Requirement; thereafter and at all times the balance of the Debt Service Reserve Account is equal to or greater than the Debt Service Reserve Requirement, such Investment Earnings shall be deposited in the Payments Account.

The Series Ordinance authorizing the issuance of any Subordinate Bonds shall specify any maturity limitations and allocations of Investment Earnings on investments of moneys in the funds and accounts relating to such Subordinate Bonds.

Moneys in each of such funds shall be accounted for as a separate and special fund apart from all other District funds, provided that investments of moneys therein may be made in a pool of investments together with other moneys of the District so long as sufficient Permitted Investments in such pool, not allocated to other investments of contractually or legally limited duration, are available to meet the requirements of the foregoing provisions.

All investments made under the Bond Ordinance shall, for purposes of the Bond Ordinance, be valued at fair market value on the 45th day (or the next succeeding Business Day if such 45th day is not a Business Day) prior to each Interest Payment Date. The valuation of the investment of moneys in funds and accounts created by a Series Ordinance in connection with the issuance of SRF Bonds shall be as set forth in such Series Ordinance.

#### **MAINTENANCE OF SYSTEM**

The District covenants that it will enforce reasonable rules and regulations governing the System and the operation thereof, that it will operate the System in an efficient and economical manner and will at all times maintain the System in good repair and in sound operating condition, that it will make all necessary repairs, renewals, and replacements to the System, and that it will comply with all valid acts, rules, regulations, orders, and directions of any legislative, executive, administrative, or judicial body applicable to the System and the District's operation thereof.

#### **RATE COVENANT**

See the heading **"SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Rate Covenant."**

#### **INSURANCE**

With respect to the System, the District will carry adequate public liability, fidelity and property insurance, such as is maintained by similar utilities as the System.

The District shall indemnify itself against the usual hazards incident to the construction of any Project, and without in any way limiting the generality of the above, shall: (a) require each construction contractor and each subcontractor to furnish a bond, or bonds, of such type and in amounts adequate to assure the faithful performance of their contracts and the payment of all bills and claims for labor and material arising by virtue of such contracts; and (b) require each construction contractor or the subcontractor to maintain at all times until the completion and acceptance of the Project adequate

compensation insurance for all of their employees and adequate public liability and property damage insurance for the full and complete protection of the District from any and all claims of every kind and character which may arise by virtue of the operations under their contracts, whether such operations be by themselves or by anyone directly or indirectly for them, or under their control.

All such policies shall be for the benefit of and made payable to the District and shall be on deposit with the District; provided, however, the District may elect to be a self-insurer with respect to any risks for which insurance is required under the Bond Ordinance. The cost of such insurance may be paid as an Expense of Operation and Maintenance.

All moneys received for losses under any such insurance policies, except public liability policies, are pledged by the District as security for the Bonds until and unless such proceeds are paid out in making good the loss or damage in respect of which such proceeds are received, either by repairing the property damaged or replacing the property destroyed or by depositing the same in the Renewal and Extension Fund. Adequate provision for making good such loss and damage shall be made within 120 days from the date of the loss. Insurance proceeds not used in making such provision shall be deposited in the Renewal and Extension Fund on the expiration of such 120-day period. Such insurance proceeds shall be payable to the District by appropriate clause to be attached to or inserted in the policies.

#### **NO SALE, LEASE OR ENCUMBRANCE; EXCEPTIONS**

Except as expressly permitted in the Bond Ordinance, the District irrevocably covenants, binds, and obligates itself not to sell, lease, encumber, or in any manner dispose of the System as a whole or in part until all of the Bonds and all interest thereon shall have been paid in full or provision for payment has been made in accordance with the Bond Ordinance.

The District shall have and reserves the right to sell, lease, or otherwise dispose of any of the property comprising a part of the System in the following manner, if any one of the following conditions exists: (i) such property is not necessary for the operation of the System; (ii) such property is not useful in the operation of the System; (iii) such property is not profitable in the operation of the System; or (iv) the disposition of such property will be advantageous to the System and will not adversely affect the security for the Bondholders. All proceeds of any such sale, lease or other disposition shall be deposited in the Renewal and Extension Fund.

Prior to any such sale, lease or other disposition, there shall be filed with the District: (i) an opinion of Bond Counsel to the effect that such sale, lease or other disposition will not adversely affect the extent to which interest on any Tax-Exempt Bonds is excluded from gross income for federal income tax purposes (provided that such opinion shall not be required if the Chief Financial Officer determines that such portion of the System was not financed with the proceeds of any Tax-Exempt Bonds); and (ii) an opinion of a Consultant expressing the view that such sale, lease or other disposition will not result in any diminution of Net Operating Revenues to the extent that in any future Fiscal Year the Net Operating Revenues and Investment Earnings will be less than (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds to be Outstanding after such sale, lease or other disposition or (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds to be Outstanding after such sale, lease or other disposition. In reaching this conclusion, the Consultant shall take into consideration such factors as the Consultant may deem significant, including (i) anticipated diminution of Operating Revenues, (ii) anticipated increase or decrease in Expenses of Operation and Maintenance attributable to the sale, lease or other disposition, and (iii) reduction in the annual Debt Service Requirement attributable to the application of the proceeds of such sale, lease or other disposition to the provision for payment of Bonds

therefore Outstanding. Such sale, lease or other disposition may include a partial interest in a sanitary sewer facility owned or to be owned in whole or in part by the District.

The District reserves the right to transfer the System as a whole to any political subdivision or authority or agency of one or more political subdivisions of the State to which may be delegated the legal authority to own and operate the System, or any portion thereof, on behalf of the public, and which undertakes in writing, filed with the District, the District's obligations under the Bond Ordinance, provided that there shall be first filed with the District: (i) an opinion of Bond Counsel to the effect that such sale will not adversely affect the extent to which interest on any Tax-Exempt Bonds is excluded from gross income for federal income tax purposes; and (ii) an opinion of a Consultant expressing the view that such transfer will not result in any diminution of Net Operating Revenues to the extent that in any future Fiscal Year the Net Operating Revenues and Investment Earnings will be less than (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds to be Outstanding after such transfer or (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds to be Outstanding after such transfer. In reaching this conclusion, the Consultant shall take into consideration such factors as the Consultant may deem significant, including any rate schedule adopted by the transferee political subdivision, authority, or agency.

Upon receipt of an opinion of Bond Counsel to the effect that such action will not adversely affect the extent to which interest on any Tax-Exempt Bonds is excluded from gross income for federal income tax purposes, the District may enter into such management contracts and sale/leaseback agreements as the District may deem appropriate, and such management contracts and sale/leaseback agreements shall not constitute a sale, lease or other disposition within the meaning of the Bond Ordinance.

#### **ENFORCEMENT OF CHARGES AND CONNECTIONS**

Except as otherwise determined in accordance with District policy and provided that such action or inaction will not materially impair the rights of the Bondholders, the District shall compel the prompt payment of rates, fees, and charges imposed for service rendered on every lot or parcel connected with the System, and to that end will vigorously enforce all of the provisions of any resolution or ordinance of the District having to do with sanitary sewer connections and with sanitary sewer charges, and all of the rights and remedies permitted the District under law. The District expressly covenants and agrees that such charges will be enforced and promptly collected to the full extent permitted by law, including the requirement for the making of reasonable deposits by customers of the System to the extent required by the District and the securing of injunctions against the disposition of sewage or industrial waste into the System by any premises delinquent in the payment of such charges.

None of the facilities or services afforded by the System will be furnished to any user without a reasonable charge being made therefor.

#### **ANNUAL BUDGET**

The District agrees to adopt an Annual Budget for the System for each Fiscal Year in compliance with the Charter and the rate covenants as stated in the Bond Ordinance.



## **BOOKS AND AUDITS**

The District will install and maintain proper books, records and accounts for the System according to standard accounting practices for the operation of facilities comparable to the System. Annual audits will be made by a certified public accountant.

## **SENIOR AND SUBORDINATE LIEN BONDS**

### **No Prior Lien Bonds nor Senior Bonds Except as Permitted in the Bond Ordinance**

All Senior Bonds shall have complete parity of lien on the Pledged Revenues despite the fact that any of the Senior Bonds may be delivered at an earlier date than any other of the Senior Bonds. The District may issue Senior Bonds in accordance with the Bond Ordinance, but the District shall issue no other obligations of any kind or nature payable from or enjoying a lien on the Pledged Revenues or any part thereof having priority over or, except as permitted in the Bond Ordinance, on a parity with the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds and the Series 2017A Bonds.

### **Refunding Bonds**

Any or all of the Senior Bonds may be refunded prior to maturity, upon redemption in accordance with their terms, or with the consent of the owners of such Senior Bonds, and the refunding Bonds so issued shall constitute Senior Bonds, if:

- (a) The District shall have obtained a report from an Independent Certified Public Accountant or a Financial Advisor demonstrating that the refunding will reduce the total debt service payments on Outstanding Senior Bonds on a present value basis.
- (b) As an alternative to, and in lieu of, satisfying the requirements of paragraph (a) above, all Outstanding Senior Bonds are being refunded under arrangements which immediately result in making provision for the payment of the refunded Bonds.
- (c) The requirements described in paragraphs (e) and (g) below under the caption “**SENIOR AND SUBORDINATE LIEN BONDS – Senior Bonds**”) are met with respect to such refunding Bonds.

### **Senior Bonds**

Bonds (including refunding Bonds which do not meet the requirements of the Bond Ordinance described above under the caption “**SENIOR AND SUBORDINATE LIEN BONDS – Refunding Bonds**”) may also be issued on a parity with the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds and the Series 2017A Bonds pursuant to a Series Ordinance, and the Bonds so issued shall constitute Senior Bonds, if all of the following conditions are satisfied:

- (a) There shall have been filed with the District either:
  - (i) a report by an Independent Certified Public Accountant to the effect that the historical Net Operating Revenues and Investment Earnings for a period of 12 consecutive months of the most recent 18 consecutive months prior to the issuance of the

proposed Senior Bonds were equal to at least (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds and (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds, or

(ii) a report by a Consultant to the effect that the forecasted Net Operating Revenues and Investment Earnings for each Fiscal Year in the Forecast Period are expected to equal at least (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds and (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds.

The report by the Independent Certified Public Accountant that is required by the Bond Ordinance and described in subparagraph (i) above may contain pro forma adjustments to historical Net Operating Revenues equal to 100% of the increased annual amount attributable to any revision in the schedule of rates, fees, and charges for the services, facilities, and commodities furnished by the System, adopted prior to the date of delivery of the proposed Senior Bonds and not fully reflected in the historical Net Operating Revenues actually received during such 12-month period. Such pro forma adjustments shall be based upon a report of a Consultant as to the amount of Operating Revenues which would have been received during such 12-month period had the new rate schedule been in effect throughout such 12-month period.

The report by the Consultant that is required by the Bond Ordinance and described in subparagraph (ii) above may not take into consideration any rate schedule to be imposed in the future, unless such rate schedule has been adopted by ordinance of the Governing Body. Such rate schedule adopted by ordinance may contain, however, future effective dates.

(b) The District shall have received, at or before issuance of the Senior Bonds, a report from an Independent Certified Public Accountant to the effect that the payments required to be made into each account of the Sinking Fund have been made and the balance in each account of the Sinking Fund is not less than the balance required by the Bond Ordinance as of the date of issuance of the proposed Senior Bonds.

(c) Except with respect to Senior SRF Bonds, the Series Ordinance authorizing the proposed Senior Bonds must either (a) state that the proposed Senior Bonds are Senior Uncovered Bonds and thus not secured by the Debt Service Reserve Account or (b) require (i) that the amount to be accumulated and maintained in the Debt Service Reserve Account be increased to not less than 100% of the Debt Service Reserve Requirement computed on a basis which includes all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds and (ii) that the amount of such increase be deposited in such account on or before the date and at least as fast as specified in the Bond Ordinance.

(d) The Series Ordinance authorizing the proposed Senior Bonds must require the proceeds of such proposed Senior Bonds to be used solely to make capital improvements to the System, to fund interest on the proposed Senior Bonds, to acquire existing or proposed sanitary sewer utilities, to refund other obligations issued for such purposes (whether or not such refunding Bonds satisfy the requirements of the Bond Ordinance described above under the caption **“SENIOR AND SUBORDINATE LIEN BONDS – Refunding Bonds”**), and to pay expenses incidental thereto and to the issuance of the proposed Senior Bonds.

(e) If any Senior Bonds would bear interest at a Variable Rate, the Series Ordinance under which such Senior Bonds are issued shall provide a maximum rate of interest per annum which such Senior Bonds may bear.

(f) The Chief Officer shall have certified, by written certificate dated as of the date of issuance of the Senior Bonds, that the District is in compliance with all requirements of the Bond Ordinance.

(g) The District shall have received an opinion of Bond Counsel, dated as of the date of issuance of the Senior Bonds, to the effect that the Series Ordinance and any related Supplemental Ordinance authorizing the issuance of Senior Bonds have been duly adopted by the District.

### **Subordinate Bonds**

Bonds may also be issued on a subordinate basis to the Series 2010B Bonds, the Series 2011B Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2013B Bonds, the Series 2015B Bonds, the Series 2016C Bonds, the Series 2017A Bonds and any other Senior Bonds pursuant to a Series Ordinance, and the Bonds so issued shall constitute Subordinate Bonds, if all of the following conditions are satisfied:

(a) There shall have been filed with the District either:

(i) a report by an Independent Certified Public Accountant to the effect that the historical Net Operating Revenues and Investment Earnings for a period of 12 consecutive months of the most recent 18 consecutive months prior to the issuance of the proposed Subordinate Bonds were equal to at least (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Subordinate Bonds and (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Subordinate Bonds, or

(ii) a report by a Consultant to the effect that the forecasted Net Operating Revenues and Investment Earnings for each Fiscal Year in the Forecast Period are expected to equal at least (A) 125% of the Maximum Annual Debt Service Requirement on all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Subordinate Bonds and (B) 115% of the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Subordinate Bonds.

The report by the Independent Certified Public Accountant that is required by the Bond Ordinance and described in subparagraph (i) above may contain pro forma adjustments to historical Net Operating Revenues equal to 100% of the increased annual amount attributable to any revision in the schedule of rates, fees, and charges for the services, facilities, and commodities furnished by the System, adopted prior to the date of delivery of the proposed Subordinate Bonds and not fully reflected in the historical Net Operating Revenues actually received during such 12-month period. Such pro forma adjustments shall be based upon a report of a Consultant as to the amount of Operating Revenues which would have been received during such 12-month period had the new rate schedule been in effect throughout such 12-month period.

The report by the Consultant that is required by the Bond Ordinance and described in subparagraph (ii) above may not take into consideration any rate schedule to be imposed in the future, unless such rate schedule has been adopted by ordinance of the Governing Body. Such rate schedule adopted by ordinance may contain, however, future effective dates.

(b) The Series Ordinance authorizing the Subordinate Bonds shall provide that such Subordinate Bonds shall be junior and subordinate in lien and right of payment to all Senior Bonds Outstanding at any time.

(c) The Series Ordinance authorizing the Subordinate Bonds shall establish funds and accounts for the moneys to be used to pay debt service on the Subordinate Bonds, to pay Hedge Payments under Subordinate Hedge Agreements, and to provide reserves therefor.

(d) The requirements of the Bond Ordinance described in paragraphs (d), (e) and (g) above under the caption “**SENIOR AND SUBORDINATE LIEN BONDS – Senior Bonds**”) are met with respect to such Subordinate Bonds (as if such Bonds constituted Senior Bonds).

In the event of any insolvency or bankruptcy proceedings, and any receivership, liquidation, reorganization, or other similar proceedings in connection therewith, relative to the District or to its creditors, as such, or to its property, and in the event of any proceedings for voluntary liquidation, dissolution, or other winding up of the District, whether or not involving insolvency or bankruptcy, the owners of all Senior Bonds then Outstanding and related Qualified Hedge Providers shall be entitled to receive payment in full of all Principal and interest due on all such Senior Bonds in accordance with the provisions of the Bond Ordinance and related Hedge Payments in accordance with the provisions of the Senior Hedge Agreements before the owners of the Subordinate Bonds or related Qualified Hedge Providers are entitled to receive any payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Bond Ordinance on account of Principal of, premium, if any, or interest on the Subordinate Bonds or Hedge Payments under Subordinate Hedge Agreements.

In the event that any of the Subordinate Bonds are declared due and payable before their expressed maturities because of the occurrence of an Event of Default (under circumstances when the provisions of preceding paragraph are not be applicable), no owners of Subordinate Bonds or related Qualified Hedge Providers may receive any accelerated payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Bond Ordinance of Principal of, premium, if any, or interest on the Subordinate Bonds or Hedge Payments under Subordinate Hedge Agreements, until the owners of all Senior Bonds Outstanding and related Qualified Hedge Providers have received timely payment when due of all Principal of and interest on all such Senior Bonds and all Hedge Payments under related Senior Hedge Agreements.

If any Event of Default shall have occurred and be continuing (under circumstances when the provisions of second preceding paragraph are not applicable), the owners of all Senior Bonds then Outstanding and related Qualified Hedge Providers shall be entitled to receive payment in full of all Principal and interest then due on all such Senior Bonds and all Hedge Payments under related Senior Hedge Agreements before the owners of the Subordinate Bonds or related Qualified Hedge Providers are entitled to receive any Payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Bond Ordinance of Principal of, premium, if any, or interest on the Subordinate Bonds or Hedge Payments under Subordinate Hedge Agreements.

The obligations of the District to pay to the owners of the Subordinate Bonds the Principal of, premium, if any, and interest thereon in accordance with their terms and to pay Hedge Payments to related Qualified Hedge Providers in accordance with the terms of the Subordinate Hedge Agreements

shall be unconditional and absolute. Nothing in the Bond Ordinance shall prevent the owners of the Subordinate Bonds or related Qualified Hedge Providers from exercising all remedies otherwise permitted by applicable law or under the Bond Ordinance or the Subordinate Hedge Agreements upon default thereunder, subject to the rights contained in the Bond Ordinance of the owners of Senior Bonds and related Qualified Hedge Providers to receive cash, property, or securities otherwise payable or deliverable to the owners of the Subordinate Bonds and related Qualified Hedge Providers, and any Series Ordinance authorizing Subordinate Bonds may provide that, insofar as a trustee or paying agent for the Subordinate Bonds is concerned, the foregoing provisions shall not prevent the application by such trustee or paying agent of any moneys deposited with such trustee or paying agent for the purpose of the payment of or on account of the Principal of, premium, if any, and interest on such Subordinate Bonds and Hedge Payments under Subordinate Hedge Agreements if such trustee or paying agent did not have knowledge at the time of such application that such payment was prohibited by the foregoing provisions.

Any series of Subordinate Bonds and related Subordinate Hedge Agreements may have such rank or priority with respect to any other series of Subordinate Bonds and related Subordinate Hedge Agreements as may be provided in the Series Ordinance authorizing such series of Subordinate Bonds and may contain such other provisions as are not in conflict with the provisions of the Bond Ordinance.

#### **Accession of Subordinate Bonds and Related Subordinate Hedge Agreements to Senior Status**

By proceedings authorizing all or any Subordinate Bonds, the District may provide for the accession of such Subordinate Bonds and related Subordinate Hedge Agreements to the status of complete parity with the Senior Bonds and related Senior Hedge Agreements if, as of the date of accession, the conditions of the Bond Ordinance described in subparagraphs (a), (e) and (f) above under the caption “**SENIOR AND SUBORDINATE LIEN BONDS – Senior Bonds**”) are satisfied, on a basis which includes all Outstanding Senior Bonds and such Subordinate Bonds, and if on the date of accession:

- (a) the Debt Service Reserve Account contains an amount equal to the Debt Service Reserve Requirement computed on a basis which includes all Outstanding Senior Bonds and such Subordinate Bonds (but which excludes, in the case of both Outstanding Senior Bonds and such Subordinate Bonds, any SRF Bonds and Senior Uncovered Bonds); and
- (b) the Payments Account contains the amount which would have been required to be accumulated therein on the date of accession if the Subordinate Bonds had originally been issued as Senior Bonds.

#### **Credit Facilities and Hedge Agreements**

In connection with the issuance of any Bonds under the Bond Ordinance, the District may obtain or cause to be obtained one or more Credit Facilities providing for payment of all or a portion of the Principal of, premium, if any, or interest due or to become due on such Bonds, providing for the purchase of such Bonds by the Credit Facility Provider, or providing funds for the purchase of such Bonds by the District. In connection therewith the District shall enter into Credit Facility Agreements with such Credit Facility Providers providing for, among other things, (i) the payment of fees and expenses to such Credit Facility Providers for the issuance of such Credit Facilities; (ii) the terms and conditions of such Credit Facilities and the Bonds affected thereby; and (iii) the security, if any, to be provided for the issuance of such Credit Facilities. The District may secure any Credit Facility by an agreement providing for the purchase of the Bonds secured thereby with such adjustments to the rate of interest, method of determining interest, maturity, or redemption provisions as are specified by the District in the applicable Series Ordinance. The District may in a Credit Facility Agreement agree to directly reimburse such

Credit Facility Provider for amounts paid under the terms of such Credit Facility, together with interest thereon; provided, however, that no Reimbursement Obligation shall be created for purposes of the Bond Ordinance until amounts are paid under such Credit Facility. Any such Reimbursement Obligation shall be deemed to be a part of the Bonds to which the Credit Facility relates which gave rise to such Reimbursement Obligation, and references to Principal and interest payments with respect to such Bonds shall include Principal and interest (except for Additional Interest and Principal amortization requirements with respect to the Reimbursement Obligation that are more accelerated than the amortization requirements for the related Bonds, without acceleration) due on the Reimbursement Obligation incurred as a result of payment of such Bonds with the Credit Facility. All other amounts payable under the Credit Facility Agreement (including any Additional Interest and Principal amortization requirements with respect to the Reimbursement obligation that are more accelerated than the amortization requirements for the related Bonds, without acceleration) shall be fully subordinate to the payment of debt service on the related class of Bonds. Any such Credit Facility shall be for the benefit of and secure such Bonds or portion thereof as specified in the applicable Series Ordinance.

In connection with the issuance of any Bonds or at any time thereafter so long as such Bonds remain Outstanding, the District may enter into Hedge Agreements with Qualified Hedge Providers, and no other providers, with respect to any Bonds. The District shall authorize the execution, delivery, and performance of each Hedge Agreement in a Supplemental Ordinance, in which it shall designate the related Hedged Bonds. The District's obligation to pay Hedge Payments may be secured by a pledge of, and lien on, the Pledged Revenues on a parity with the lien created by the Bond Ordinance to secure the related Hedged Bonds, or may be subordinated in lien and right of payment to the payment of the Bonds, as determined by the District.

### **Other Obligations**

The District expressly reserves the right, at any time, to adopt one or more other bond ordinances and reserves the right, at any time, to issue any other obligations not secured by the amounts pledged under the Bond Ordinance.

## **DEFAULT AND ENFORCEMENT**

### **Events of Default**

An "Event of Default" shall mean the occurrence of any one or more of the following:

- (a) failure to pay the Principal or redemption price of any Bond when the same shall become due and payable, either at maturity or by proceedings for redemption or otherwise; or
- (b) failure to pay any installment of interest on any Bond when and as such installment of interest shall become due and payable; or
- (c) default shall be made by the District in the performance of any obligation in respect to the Debt Service Reserve Account and such default shall continue for 30 days thereafter; or
- (d) the District shall (1) admit in writing its inability to pay its debts generally as they become due, (2) file a petition in bankruptcy or take advantage of any insolvency act, (3) make an assignment for the benefit of its creditors, (4) consent to the appointment of a receiver of itself or of the whole or any substantial part of its property, or (5) be adjudicated a bankrupt; or

(e) a court of competent jurisdiction shall enter an order, judgment, or decree appointing a receiver of the System or any of the funds or accounts established in the Bond Ordinance, or of the whole or any substantial part of the District's property, or approving a petition seeking reorganization of the District under the federal bankruptcy laws or any other applicable law or statute of the United States of America or the State, and such order, judgment, or decree shall not be vacated or set aside or stayed within 60 days from the date of the entry thereof; or

(f) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of any of the funds or accounts established in the Bond Ordinance, or of the whole or any substantial part of the District's property, and such custody or control shall not be terminated or stayed within 60 days from the date of assumption of such custody or control; or

(g) the District shall fail to perform any of the other covenants, conditions, agreements, and provisions contained in the Bonds or in the Bond Ordinance (other than the covenant in the Bond Ordinance relating to continuing disclosure) on the part of the District to be performed, and such failure shall continue for 90 days after written notice specifying such failure and requiring it to be remedied shall have been given to the District by the owners of not less than, or a Credit Facility Provider securing not less than, 25% in aggregate Principal of the Bonds then Outstanding; provided, however, if the failure stated in such notice can be corrected, but not within such 90-day period, the District shall have 180 days after such written notice to cure such default if corrective action is instituted by the District within such 90-day period and diligently pursued until the failure is corrected; or

(h) (1) an Event of Default relating to the non-payment of the Principal or redemption price or installment of interest shall occur under any Series Ordinance or (2) an Event of Default, other than as described in clause (h)(1) shall occur under any Series Ordinance; or

(i) failure by any Credit Facility Provider to pay the purchase price of Bonds under any Credit Facility then in effect; or

(j) delivery to the District by a Credit Facility Provider of written notice stating that an "Event of Default" has occurred under any Credit Facility Agreement; or

(k) delivery to the District by a Qualified Hedge Provider of written notice stating that an "event of default" has occurred under any Senior Hedge Agreement.

## **Remedies**

Upon the happening and continuance of any Event of Default described in clauses (a), (b) and (h)(1) above under the caption "Events of Default" as to any Senior Bond, then and in every such case, upon the written declaration of the owners of more than 50% in aggregate Principal of all Senior Bonds then Outstanding or upon the written demand of a Credit Facility Provider securing more than 50% in aggregate Principal of the Senior Bonds then Outstanding, the Principal of all Senior Bonds then Outstanding shall become due and payable immediately, together with the interest accrued thereon to the date of such acceleration, at the place of payment provided therein, and interest on the Senior Bonds shall cease to accrue after the date of such acceleration, anything in the Bond Ordinance or in the Senior Bonds to the contrary notwithstanding. With respect to any Senior Bonds secured by a Credit Facility, only the applicable Credit Facility Provider may give written demand to declare the Principal of and accrued interest on such Senior Bonds to be immediately due and payable.

Upon the happening and continuance of any Event of Default described in clause (i) above under the caption "Events of Default", then and in every such case, upon the written declaration of the owners of more than 50% in aggregate Principal of the Senior Bonds of the affected series then Outstanding, the Principal of all Senior Bonds of the affected series then Outstanding shall become due and payable immediately, together with the interest accrued thereon to the date of such acceleration, at the place of payment provided therein, and interest on the Senior Bonds of the affected series shall cease to accrue after the date of such acceleration, anything in the Bond Ordinance or in the Senior Bonds of the affected series to the contrary notwithstanding.

Upon the happening and continuance of any Event of Default described in clause (k) above under the caption "Events of Default", then and in every such case, upon the written declaration of the owners of more than 50% in aggregate Principal of the Senior Bonds of the affected series then Outstanding, the Principal of all Senior Bonds of the affected series then Outstanding shall become due and payable immediately, together with the interest accrued thereon to the date of such acceleration, at the place of payment provided therein, and interest on the Senior Bonds of the affected series shall cease to accrue after the date of such acceleration, anything in the Bond Ordinance or in the Senior Bonds of the affected series to the contrary notwithstanding. Notwithstanding the foregoing, with respect to any Senior Bonds secured by a Credit Facility, only the applicable Credit Facility Provider may give written demand to declare the Principal of and accrued interest on such Senior Bonds to be immediately due and payable.

Upon any declaration of acceleration under the Bond Ordinance, the District shall immediately draw under the applicable Credit Facility to the extent permitted by the terms thereof that amount which, together with other amounts on deposit under the Bond Ordinance, shall be sufficient to pay the Principal of and accrued interest on the related Senior Bonds so accelerated.

The above provisions, however, are subject to the condition that if, after the Principal of the Senior Bonds shall have been so accelerated, all arrears of interest upon such Bonds, and interest on overdue installments of interest at the rate on such Bonds, shall have been paid by the District, the Principal of such Bonds which has matured (except the Principal of any Bonds not then due by their terms except as provided above) have been paid, and the District shall also have performed all other things in respect to which it may have been in default under the Bond Ordinance, and, if applicable, each Credit Facility Provider shall have reinstated the Credit Facility in the full amount available to be drawn thereunder by written notice to the District, then, in every such case, the owners of more than 50% in aggregate Principal of all Senior Bonds then Outstanding by written notice to the District, may waive such default and its consequences and such waiver shall be binding upon the District and upon all owners of the Bonds; but no such waiver shall extend to or affect any subsequent default or impair any right or remedy consequent thereon. Notwithstanding the foregoing, as long as the applicable Credit Facility Provider shall not then continue to dishonor draws under the Credit Facility, no Event of Default with respect to the related Senior Bonds may be waived without the express written consent of such Credit Facility Provider.

Upon the happening and continuance of any Event of Default, any owner of Senior Bonds then Outstanding affected by the Event of Default or a duly authorized agent for such owner may proceed to protect and enforce its rights and the rights of the owners of Senior Bonds by such of the following remedies as it shall deem most effectual to protect and enforce such rights:

- (1) by mandamus or other suit, action, or proceeding at law or in equity, enforce all rights of the owners of Senior Bonds, including the right to require the appointment of a receiver for the System or to exercise any other right or remedy provided by the Constitution and laws of the State and the Charter and to require the District to perform any other covenant or agreement contained in the Bond Ordinance;



(2) by action or suit in equity, require the District to account as if it were the trustee of an express trust for the owners of the Senior Bonds;

(3) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the owners of the Senior Bonds; or

(4) by pursuing any other available remedy at law or in equity or by statute.

In the enforcement of any remedy under the Bond Ordinance, owners of Senior Bonds shall be entitled to sue for, enforce payment on, and receive any and all amounts then or during any default becoming, and at any time remaining, due from the District for Principal, redemption premium, interest, or otherwise, under any provision of the Bond Ordinance or of the Senior Bonds, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Senior Bonds, together with any and all costs and expenses of collection and of all proceedings under the Bond Ordinance and under such Senior Bonds, without prejudice to any other right or remedy of the owners of Senior Bonds, and to recover and enforce a judgment or decree against the District for any portion of such amounts remaining unpaid, with interest, costs, and expenses, and to collect from any moneys available for such purpose, in any manner provided by law, the moneys adjudged or decreed to be payable.

If no Senior Bonds are then Outstanding or if no Event of Default with respect to any Senior Bonds has then occurred and is continuing, in the enforcement of any remedy under the Bond Ordinance, owners of Subordinate Bonds shall be entitled to sue for, enforce payment on, and receive any and all amounts then or during any default becoming, and at any time remaining, due from the District for Principal, redemption premium, interest, or otherwise, under any provision of the Bond Ordinance or of the Subordinate Bonds, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Subordinate Bonds, together with any and all costs and expenses of collection and of all proceedings under the Bond Ordinance and under such Subordinate Bonds, without prejudice to any other right or remedy of the owners of Subordinate Bonds, and to recover and enforce a judgment or decree against the District for any portion of such amounts remaining unpaid, with interest, costs, and expenses, and to collect from any moneys available for such purpose, in any manner provided by law, the moneys adjudged or decreed to be payable. Nothing in this paragraph is intended to diminish the rights of the owners of Subordinate Bonds described in clauses (1) through (4) above.

No remedy conferred upon or reserved to the Bondholders is intended to be exclusive of any other remedy or remedies, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given under the Bond Ordinance or now or hereafter existing at law or in equity or by statute.

#### **Application of Moneys After Default**

If an Event of Default occurs and shall not have been remedied, the District or a receiver appointed for the purpose shall apply all Pledged Revenues (except with respect to the Debt Service Reserve Account which does not secure Subordinate Bonds, Senior SRF Bonds and Senior Uncovered Bonds) as follows and in the following order of priority:

(a) Expenses of Receiver and Paying Agent and Bond Registrar - to the payment of the reasonable and proper charges, expenses, and liabilities of any receiver and the Paying Agent and Bond Registrar under the Bond Ordinance;

(b) Expenses of Operation and Maintenance and Renewals and Replacements - to the payment of all reasonable and necessary Expenses of Operation and Maintenance and major renewals and replacements to the System;

(c) Principal or Redemption Price, Interest, and Hedge Payments Relating to Senior Bonds - to the payment of the interest and Principal or redemption price then due on the Senior Bonds and Hedge Payments then due under Senior Hedge Agreements, as follows:

(i) Unless the Principal of all the Senior Bonds shall have become due and payable, all such moneys shall be applied as follows:

*first:* To the payment to the persons entitled thereto of all installments of interest then due on the Senior Bonds, in the order of the maturity of such installments (with interest on defaulted installments of interest at the rate or rates borne by the Senior Bonds with respect to which such interest is due, but only to the extent permitted by law), and, if the amount available shall not be sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference. If some of the Senior Bonds bear interest payable at different intervals or upon different dates and if at any time moneys from the Debt Service Reserve Account must be used to pay any such interest, the moneys in the Debt Service Reserve Account shall be applied (to the extent necessary) to the payment of all interest becoming due on the dates upon which such interest is payable to and including the next succeeding semiannual Interest Payment Date specified for the Senior Bonds. After such date, moneys in the Debt Service Reserve Account plus any other moneys available in the Payments Account shall be set aside for the payment of interest on Senior Bonds of each class (a class consisting of all Senior Bonds payable as to interest on the same dates) pro rata among Senior Bonds of the various classes on a daily basis so that there shall accrue to each owner of a Senior Bond throughout each Fiscal Year the same proportion of the total interest payable to such owner of a Senior Bond as shall so accrue to every other owner of a Senior Bond during such Fiscal Year.

*second:* To the payment of the Hedge Payments due under any Senior Hedge Agreements pursuant to their terms.

*third:* To the payment to the persons entitled thereto of the unpaid Principal of any of the Senior Bonds which shall have become due at maturity or upon mandatory redemption prior to maturity (other than Senior Bonds called for redemption for the payment of which moneys are held pursuant to the provisions of the Bond Ordinance), in the order of their due dates, with interest upon such Senior Bonds from the respective dates upon which they became due, and, if the amount available shall not be sufficient to pay in full Senior Bonds due on any particular date, together with such interest, then to the payment first of such interest, ratably according to the amount of such interest due on such date, and then to the payment of such Principal, ratably according to the amount of such Principal due on such date, to the persons entitled thereto without any discrimination or preference. If some of the Senior Bonds mature (including mandatory redemption prior to maturity as a maturity) upon a different date or dates, and if at any time moneys from the Debt Service Reserve Account must be used to pay any such Principal becoming due, the moneys in the Debt Service

Reserve Account not required to pay interest under paragraph first above shall be applied to the extent necessary to the payment of all Principal becoming due on the dates upon which such Principal is payable to and including the final annual Principal Maturity Date specified for the Senior Bonds. After such date, moneys in the Debt Service Reserve Account not required to pay interest plus any other moneys available in the Payments Account shall be set aside for the payment of Principal of Senior Bonds of each class (a class consisting of all Senior Bonds payable as to Principal on the same date) pro rata among Senior Bonds of the various classes which mature or must be redeemed pursuant to mandatory redemption prior to maturity throughout each Fiscal Year in such proportion of the total Principal payable on each such Senior Bond as shall be equal among all classes of Senior Bonds maturing or subject to mandatory redemption within such Fiscal Year.

*fourth:* To the payment of the redemption premium on and the Principal of any Senior Bonds called for optional redemption pursuant to their terms.

(ii) If the Principal of all the Senior Bonds shall have become due and payable, all such moneys shall be applied to the payment of the Principal and interest then due and unpaid upon the Senior Bonds, with interest thereon as aforesaid, and due and unpaid Hedge Payments under Senior Hedge Agreements, without preference or priority of Principal over interest or Hedge Payments or of interest over Principal or Hedge Payments, or of Hedge Payments over Principal or interest, or of any installment of interest over any other installment of interest, or of any Senior Bond over any other Senior Bonds, or of any such Hedge Payment over any other such Hedge Payment, ratably, according to the amounts due respectively for Principal, interest, and Hedge Payments, to the persons entitled thereto without any discrimination or preference.

### **Rights of Credit Facility Provider**

Notwithstanding any other provision of the Bond Ordinance, in the event that the District shall draw under a Credit Facility any amount for the payment of Principal of or interest on any Bonds, then upon such payment the related Credit Facility Provider shall succeed to and become subrogated to the rights of the recipients of such payments and such Principal or interest shall be deemed to continue to be unpaid and Outstanding for all purposes and shall continue to be fully secured by the Bond Ordinance until the Credit Facility Provider, as successor and subrogee, has been paid all amounts owing in respect of such subrogated payments of Principal and interest. Such rights shall be limited and evidenced by having the District note the Credit Facility Provider's rights as successor and subrogee on its records, and the District shall, upon request, deliver to the Credit Facility Provider (i) in the case of interest on the Bonds, an acknowledgment of the Credit Facility Provider's ownership of interest to be paid on the Bonds specifying the amount of interest owed, the period represented by such interest, and the CUSIP numbers of the Bonds on which such interest is owed and (ii) in the case of Principal of the Bonds, either the Bonds themselves duly assigned to the Credit Facility Provider or new Bonds registered in the name of the Credit Facility Provider or in such other name as the Credit Facility Provider shall specify. Whenever moneys become available for the payment of any interest then overdue, the Credit Facility Provider shall be treated as to interest owed to it as and as if it had been the Bondholder of the Bonds upon which such interest is payable on any special record date therefor.

## **No Obligation to Levy Taxes**

Nothing contained in the Bond Ordinance shall be construed as imposing on the District any duty or obligation to levy any taxes either to meet any obligation incurred in the Bond Ordinance or to pay the Principal of or interest on the Bonds.

## **DEFEASANCE**

Except as otherwise provided in any Series Ordinance with respect to Bonds secured by a Credit Facility, Bonds for the payment or redemption of which sufficient moneys or sufficient Government Obligations shall have been deposited with the Paying Agent or the Depository of the Sinking Fund (whether upon or prior to the maturity or the redemption date of such Bonds) shall be deemed to be paid and no longer Outstanding under the Bond Ordinance; provided, however, that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been duly given as provided in the Bond Ordinance or firm and irrevocable arrangements shall have been made for the giving of such notice; and, provided, further, that Bonds bearing interest at a Variable Rate shall not be deemed to have been paid and discharged within the meaning of the Bond Ordinance unless the interest rate payable on such Bonds is calculated at the maximum interest rate specified for such Bonds to the earlier of the first tender or redemption date. Government Obligations shall be considered sufficient for purposes of the Bond Ordinance only: (i) if such Government Obligations are not callable by the issuer of the Government Obligations prior to their stated maturity; and (ii) if such Government Obligations fall due and bear interest in such amounts and at such times as will assure sufficient cash to pay currently maturing interest and to pay Principal and redemption premiums, if any, when due on the Bonds without rendering the interest on any Tax-Exempt Bonds includable in gross income of any owner thereof for federal income tax purposes.

The District may at any time surrender to the Bond Registrar for cancellation by it any Bonds previously authenticated and delivered under the Bond Ordinance which the District may have acquired in any manner whatsoever. All such Bonds, upon such surrender and cancellation, shall be deemed to be paid and retired.

## **SUPPLEMENTAL ORDINANCES**

### **Supplemental Ordinances Not Requiring Consent of Bondholders**

The District, from time to time and at any time, subject to the conditions and restrictions in the Bond Ordinance, may adopt one or more Supplemental Ordinances which thereafter shall form a part of the Bond Ordinance, for any one or more or all of the following purposes:

- (a) To add to the covenants and agreements of the District in the Bond Ordinance other covenants and agreements thereafter to be observed or to surrender, restrict, or limit any right or power reserved in the Bond Ordinance to or conferred upon the District (including but not limited to the right to issue Senior Bonds);
- (b) To make such provisions for the purpose of curing any ambiguity, or of curing, correcting, or supplementing any defective provision contained in the Bond Ordinance, or in regard to matters or questions arising under the Bond Ordinance, as the District may deem necessary or desirable and not inconsistent with the Bond Ordinance;

(c) To subject to the lien and pledge of the Bond Ordinance additional revenues, receipts, properties, or other collateral;

(d) To evidence the appointment of successors to any Depository, Paying Agent, or Bond Registrar;

(e) To modify, amend, or supplement the Bond Ordinance in such manner as to permit the qualification of the Bond Ordinance under the Trust Indenture Act of 1939 or any federal statute hereinafter in effect, and similarly to add to the Bond Ordinance such other terms, conditions, and provisions as may be permitted or required by such Trust Indenture Act of 1939 or any similar federal statute;

(f) To make any modification or amendment of the Bond Ordinance required in order to make any Bonds eligible for acceptance by DTC or any similar holding institution or to permit the issuance of any Bonds or interests therein in book-entry form;

(g) To modify any of the provisions of the Bond Ordinance in any respect if such modification shall not become effective until after the Bonds Outstanding immediately prior to the effective date of such Supplemental Ordinance shall cease to be Outstanding and if any Bonds issued contemporaneously with or after the effective date of such Supplemental Ordinance shall contain a specific reference to the modifications contained in such subsequent proceedings;

(h) Subject to the provisions of the Bond Ordinance relating to the Project Fund, to modify the provisions of the Bond Ordinance with respect to the disposition of any moneys remaining in the Project Fund upon the completion of any Project;

(i) To increase the size or scope of the System, to add other utilities to the System, to create additional subaccounts or to abolish any subaccounts within any account, or to change the amount of the Debt Service Reserve Requirement, but not below the amount specified in such definition;

(j) To modify the Bond Ordinance to permit the qualification of any Bonds for offer or sale under the securities laws of any state in the United States of America;

(k) To modify the Bond Ordinance to provide for the issuance of Senior Bonds or Subordinate Bonds, and such modification may deal with any subjects and make any provisions which the District deems necessary or desirable for that purpose;

(l) To make such modifications in the provisions of the Bond Ordinance as may be deemed necessary by the District to accommodate the issuance of capital appreciation bonds or Bonds which bear interest at a Variable Rate; and

(m) To modify any of the provisions of the Bond Ordinance in any respect (other than a modification of the type described below under the caption “**SUPPLEMENTAL ORDINANCES – Supplemental Ordinances Requiring Consent of Bondholders**”) requiring the unanimous written consent of the Bondholders); provided that for (i) any Outstanding Bonds which are assigned a Rating and which are not secured by a Credit Facility providing for the payment of the full amount of Principal and interest to be paid thereon, each Rating Agency shall have given written notification to the District that such modification will not cause the then applicable Rating on any Bonds to be reduced or withdrawn, and (ii) any Outstanding Bonds which are secured by Credit Facilities providing for the payment of the full amount of the

Principal and interest to be paid thereon, each Credit Facility Provider shall have consented in writing to such modification.

Any Supplemental Ordinance of the District may modify the provisions of the Bond Ordinance in such a manner, and to such extent and containing such provisions, as the District may deem necessary or desirable to effect any of the purposes stated above.

As used in the Bond Ordinance, the term “modify” shall mean “modify, amend, or supplement” and the term “modification” shall mean “modification, amendment, or supplement.”

### **Supplemental Ordinances Requiring Consent of Bondholders**

With the consent (evidenced as provided in the Bond Ordinance) of the owners of not less than a majority in aggregate Principal of the Outstanding Bonds of each class (senior and subordinate), voting separately by class, the District may from time to time and at any time adopt a Supplemental Ordinance for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Bond Ordinance or of any Supplemental Ordinance; provided, however, that no such Supplemental Ordinance shall: (1) extend the maturity date or due date of any mandatory sinking fund redemption with respect to any Bond Outstanding under the Bond Ordinance; (2) reduce or extend the time for payment of Principal of, redemption premium, or interest on any Bond Outstanding under the Bond Ordinance; (3) reduce any premium payable upon the redemption of any Bond under the Bond Ordinance or advance the date upon which any Bond may first be called for redemption prior to its stated maturity date; (4) give to any Senior Bond or Senior Bonds (or related Senior Hedge Agreements) a preference over any other Senior Bond or Senior Bonds (or related Senior Hedge Agreements); (5) permit the creation of any lien or any other encumbrance on the Pledged Revenues having a lien equal to or prior to the lien created under the Bond Ordinance for the Senior Bonds; (6) reduce the percentage of owners of senior or subordinate classes of Bonds required to approve any such Supplemental Ordinance; or (7) deprive the owners of the Bonds of the right to payment of the Bonds or from the Pledged Revenues (except as otherwise provided herein with respect to the Debt Service Reserve Account), without, in each case, the consent of the owners of all the affected Bonds then Outstanding. No amendment may be made under the Bond Ordinance which affects the rights or duties of any Credit Facility Provider securing any of the Bonds or any Qualified Hedge Provider under any Hedge Agreement without its written consent.

If the District intends to enter into or adopt any Supplemental Ordinance as described in this caption, the District shall mail, by registered or certified mail, to the registered owners of the Bonds at their addresses as shown on the Bond Register, a notice of such intention along with a description of such Supplemental Ordinance not less than 30 days prior to the proposed effective date of such Supplemental Ordinance. The consents of the registered owners of the Bonds need not approve the particular form of wording of the proposed Supplemental Ordinance, but it shall be sufficient if such consents approve the substance thereof. Failure of the owner of any Bond to receive the notice required in the Bond Ordinance shall not affect the validity of any Supplemental Ordinance if the required number of owners of the Bonds of each class shall provide their written consent to such Supplemental Ordinance.

Notwithstanding any provision of the Bond Ordinance to the contrary, upon the issuance of a Credit Facility to secure any Bonds and for the period in which such Credit Facility is outstanding, the Credit Facility Provider may have the consent rights of the owners of the Bonds which are secured by such Credit Facility pertaining to some or all of the amendments or modifications of the Bond Ordinance, to the extent provided in the applicable Series Ordinance. Notwithstanding the foregoing, if a Credit Facility Provider is granted the consent rights of the owners of any Bonds in a Series Ordinance and refuses to exercise such consent rights, either affirmatively or negatively, then the registered owners of the Bonds secured by the related Credit Facility may exercise such consent rights.

#### **Notice of Supplemental Ordinances**

The District shall cause the Bond Registrar to mail a notice by registered or certified mail to the registered owners of all Bonds Outstanding, at their addresses shown on the Bond Register or at such other address as has been furnished in writing by such registered owner to the Bond Registrar, setting forth in general terms the substance of any Supplemental Ordinance which has been adopted and approved.

\* \* \*

## SUMMARY OF THE CONTINUING DISCLOSURE AGREEMENT

*The following is a summary of certain provisions and covenants contained in the Continuing Disclosure Agreement. Such summary does not purport to be a complete statement of the terms of the Continuing Disclosure Agreement and accordingly is qualified in its entirety by reference thereto and is subject to the full text thereof.*

### Definitions

In addition to the definitions set forth in the Continuing Disclosure Agreement, the following capitalized terms shall have the following meanings:

**“Annual Filing Date”** means the date, set in the Continuing Disclosure Agreement, by which the Annual Report is to be filed with the MSRB.

**“Annual Financial Information”** means annual financial information as such term is used in paragraph (b)(5)(i) of the Rule and specified in the Continuing Disclosure Agreement.

**“Annual Report”** means an Annual Report containing Annual Financial Information described in and consistent with the Continuing Disclosure Agreement.

**“Audited Financial Statements”** means the annual financial statements (if any) of the District for the prior fiscal year, certified by an independent auditor as prepared in accordance with generally accepted accounting principles or otherwise, as such term is used in paragraph (b)(5)(i)(B) of the Rule and as specified in the Continuing Disclosure Agreement.

**“Certification”** means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure delivered to the Disclosure Dissemination Agent is the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure required to be submitted to the MSRB under the Continuing Disclosure Agreement. A Certification shall accompany each such document submitted to the Disclosure Dissemination Agent by the District and shall include the full name of the Bonds and the 9-digit CUSIP numbers for all Bonds to which the document applies.

**“Disclosure Dissemination Agent”** means Digital Assurance Certification, L.L.C., acting in its capacity as Disclosure Dissemination Agent (“DAC”) under the Continuing Disclosure Agreement, or any successor Disclosure Dissemination Agent designated in writing by the District pursuant to the Continuing Disclosure Agreement.

**“Disclosure Representative”** means the Secretary-Treasurer of the District or his or her designee, or such other person as the District shall designate in writing to the Disclosure Dissemination Agent from time to time as the person responsible for providing Information to the Disclosure Dissemination Agent.

**“Failure to File Event”** means the District’s failure to file an Annual Report on or before the Annual Filing Date.

**“Force Majeure Event”** means: (i) acts of God, war, or terrorist action; (ii) failure or shut-down of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond



the Disclosure Dissemination Agent's reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Disclosure Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Disclosure Dissemination Agent from performance of its obligations under this Disclosure Agreement.

**"Holder"** means any person (a) having the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries) or (b) treated as the owner of any Bonds for federal income tax purposes.

**"Information"** means, collectively, the Annual Reports, the Audited Financial Statements, the Notice Event notices, the Failure to File Event notices, the Voluntary Event Disclosures and the Voluntary Financial Disclosures.

**"MSRB"** means the Municipal Securities Rulemaking Board, or any successor thereto, established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934.

**"Notice Event"** means any of the events enumerated in paragraph (b)(5)(i)(C) of the Rule and listed in the Continuing Disclosure Agreement.

**"Obligated Person"** means any person, including the District, who is either generally or through an enterprise, fund, or account of such person committed by contract or other arrangement to support payment of all, or part of the obligations on the Bonds (other than providers of municipal bond insurance, letters of credit, or other liquidity facilities).

**"Official Statement"** means that Official Statement prepared by the District in connection with the Bonds.

**"Rule"** means Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

**"Voluntary Event Disclosure"** means information of the category specified in any of subsections (e)(vi)(1) through (e)(vi)(11) of Section 2 of the Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(a) of the Disclosure Agreement.

**"Voluntary Financial Disclosure"** means information of the category specified in any of subsections (e)(vii)(1) through (e)(vii)(9) of Section 2 of the Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(b) of the Disclosure Agreement.

### **Provision of Annual Reports**

The District shall provide, annually, an electronic copy of the Annual Report and Certification to the Disclosure Dissemination Agent, not later than the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Disclosure Dissemination Agent shall provide an Annual Report to the MSRB not later than 180 days after the end of each fiscal year of the

District, commencing with the fiscal year ending June 30, 2018. Such date and each anniversary thereof is the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in the Continuing Disclosure Agreement.

If on the fifteenth (15th) day prior to the Annual Filing Date, the Disclosure Dissemination Agent has not received a copy of the Annual Report and Certification, the Disclosure Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the District of its undertaking to provide the Annual Report. Upon such reminder, the Disclosure Representative shall either (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification) no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Disclosure Dissemination Agent in writing that the District will not be able to file the Annual Report within the time required under the Continuing Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form specified in the Continuing Disclosure Agreement.

If the Disclosure Dissemination Agent has not received an Annual Report and Certification by 10:00 a.m. Eastern time on the Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual Report, a Failure to File Event shall have occurred and the Issuer irrevocably directs the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form specified in the Continuing Disclosure Agreement.

If Audited Financial Statements of the District are prepared but not available prior to the Annual Filing Date, the District shall, when the Audited Financial Statements are available, provide at such time an electronic copy to the Disclosure Dissemination Agent, accompanied by a Certification for filing with the MSRB.

The District may adjust the Annual Filing Date upon change of its fiscal year by providing written notice of such change and the new Annual Filing Date to the Disclosure Dissemination Agent, Paying Agent (if any) and the MSRB, provided that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.

### **Content of Annual Reports**

Each Annual Report shall contain Annual Financial Information with respect to the District, including the information provided in the Official Statement under the headings: **“MANAGEMENT’S DISCUSSION AND ANALYSIS - Historical and Projected Sewer Rates and Charges,” “- Customer Accounts,” “- Largest User Charge Customers,”** and **“ – User Charge Revenues.”** Each Annual Report shall include Audited Financial Statements prepared as described in the Official Statement. If Audited Financial Statements are not available, then, unaudited financial statements, prepared in accordance with generally accepted accounting principles or alternate accounting principles as described in the Official Statement will be included in the Annual Report.

Any or all of the items listed above may be included by specific reference from other documents, including official statements of debt issues with respect to which the District is an Obligated Person (as defined by the Rule), which have been previously filed with each of the Securities and Exchange Commission or available on the MSRB Internet Website. If the document incorporated by reference is a final official statement, it must be available from the MSRB. The District will clearly identify each such document so incorporated by reference.

## Reporting of Notice Events

The occurrence of any of the following events with respect to the Bonds constitutes a Notice Event:

1. Principal and interest payment delinquencies;
2. Non-payment related defaults, if material;
3. Unscheduled draws on debt service reserves reflecting financial difficulties;
4. Unscheduled draws on credit enhancements reflecting financial difficulties;
5. Substitution of credit or liquidity providers, or their failure to perform;
6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
7. Modifications to rights of Bondholders, if material;
8. Bond calls, if material, and tender offers;
9. Defeasances;
10. Release, substitution, or sale of property securing repayment of the Bonds, if material;
11. Rating changes;
12. Bankruptcy, insolvency, receivership or similar event of the Obligated Person;

For the purposes of the event described in this subsection, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an Obligated Person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Obligated Person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Obligated Person.

13. The consummation of a merger, consolidation, or acquisition involving an Obligated Person or the sale of all or substantially all of the assets of the Obligated Person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

14. Appointment of a successor or additional trustee or the change of name of a trustee, if material;

The District shall, in a timely manner not later than nine business days after its occurrence, notify the Disclosure Dissemination Agent in writing of the occurrence of a Notice Event. Such notice shall instruct the Disclosure Dissemination Agent to report the occurrence and shall be accompanied by a Certification. Such notice or Certification shall identify the Notice Event that has occurred, include the text of the disclosure that the District desires to make, contain the written authorization of the District for the Disclosure Dissemination Agent to disseminate such information, and identify the date the District desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).

The Disclosure Dissemination Agent is under no obligation to notify the District or the Disclosure Representative of an event that may constitute a Notice Event. In the event the Disclosure Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will within two business days of receipt of such notice (but in any event not later than the tenth business day after the occurrence of the Notice Event, if the District determines that a Notice Event has occurred), instruct the Disclosure Dissemination Agent that either (i) a Notice Event has not occurred and no filing is to be made or (ii) a Notice Event has occurred and the Disclosure Dissemination Agent is to report the occurrence pursuant to the Continuing Disclosure Agreement, together with a Certification. Such Certification shall identify the Notice Event that has occurred, include the text of the disclosure that the District desires to make, contain the written authorization of the District for the Disclosure Dissemination Agent to disseminate such information, and identify the date the District desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).

If the Disclosure Dissemination Agent has been instructed by the District to report the occurrence of a Notice Event, the Disclosure Dissemination Agent shall promptly file a notice of such occurrence with the MSRB in accordance with the Continuing Disclosure Agreement.

### **Voluntary Filings**

The District may instruct the Disclosure Dissemination Agent to file a Voluntary Event Disclosure or a Voluntary Financial Disclosure with the MSRB, from time to time pursuant to a Certification of the Disclosure Representative.

Nothing in the Continuing Disclosure Agreement shall be deemed to prevent the District from disseminating any other information through the Disclosure Dissemination Agent using the means of dissemination set forth in the Continuing Disclosure Agreement or including any other information in any Annual Report, Audited Financial Statement, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure, in addition to that required by the Continuing Disclosure Agreement. If the District chooses to include any information in any Annual Report, Audited Financial Statement, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure in addition to that which is specifically required by the Continuing Disclosure Agreement, the District shall have no obligation under the Continuing Disclosure Agreement to update such information or include it in any future Annual Report, Audited Financial Statement, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure.

## **Termination of Reporting Obligation**

The obligations of the District and the Disclosure Dissemination Agent under the Continuing Disclosure Agreement shall terminate with respect to the Bonds upon the legal defeasance, prior redemption or payment in full of all of the Bonds, when the District is no longer an Obligated Person, or upon delivery by the Disclosure Representative to the Disclosure Dissemination Agent of an opinion of counsel experienced in federal securities laws to the effect that continuing disclosure is no longer required.

## **Disclosure Dissemination Agent**

The District has appointed Digital Assurance Certification, L.L.C. (“DAC”) as exclusive Disclosure Dissemination Agent under the Continuing Disclosure Agreement. The District may, upon thirty days written notice to the Disclosure Dissemination Agent, replace or appoint a successor Disclosure Dissemination Agent. Upon termination of DAC’s services as Disclosure Dissemination Agent, whether by notice of the District or DAC, the District agrees to appoint a successor Disclosure Dissemination Agent or, alternately, agrees to assume all responsibilities of Disclosure Dissemination Agent under the Continuing Disclosure Agreement for the benefit of the Holders of the Bonds. Notwithstanding any replacement or appointment of a successor, the District shall remain liable to the Disclosure Dissemination Agent until payment in full for any and all sums owed and payable to the Disclosure Dissemination Agent. The Disclosure Dissemination Agent may resign at any time by providing thirty days’ prior written notice to the District.

## **Remedies in Event of Default**

In the event of a failure of the District or the Disclosure Dissemination Agent to comply with any provision of the Continuing Disclosure Agreement, the Holders’ rights to enforce the provisions of the Continuing Disclosure Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the parties’ obligation under the Continuing Disclosure Agreement. Any failure by a party to perform in accordance with the Continuing Disclosure Agreement shall not constitute a default on the Bonds or under any other document relating to the Bonds, and all rights and remedies shall be limited to those expressly stated in the Continuing Disclosure Agreement.

## **Amendment; Waiver**

Notwithstanding any other provision of the Continuing Disclosure Agreement, the District and the Disclosure Dissemination Agent may amend the Continuing Disclosure Agreement and any provision of the Continuing Disclosure Agreement may be waived, if such amendment or waiver is supported by an opinion of counsel expert in federal securities laws acceptable to both the District and the Disclosure Dissemination Agent to the effect that such amendment or waiver does not materially impair the interests of Holders of the Bonds and would not, in and of itself, cause the undertakings in the Continuing Disclosure Agreement to violate the Rule if such amendment or waiver had been effective on the date of the Continuing Disclosure Agreement but taking into account any subsequent change in or official interpretation of the Rule; provided neither the District or the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto.

Notwithstanding the preceding paragraph, the Disclosure Dissemination Agent shall have the right to adopt amendments to the Continuing Disclosure Agreement necessary to comply with modifications to and interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission from time to time by giving not less than 20 days written notice of the intent to do

so together with a copy of the proposed amendment to the District. No such amendment shall become effective if the District shall, within 10 days following the giving of such notice, send a notice to the Disclosure Dissemination Agent in writing that it objects to such amendment.

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## **APPENDIX D**

### **Report on the Financial Feasibility of The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A**

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November 22, 2017

Board of Trustees

The Metropolitan St. Louis Sewer District

2350 Market Street

St. Louis, MO 63103-2555

Raftelis Financial Consultants, Inc. (“Raftelis”) is submitting herewith the Report on the Financial Feasibility of The Metropolitan St. Louis Sewer District Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A prepared at the request of The Metropolitan St. Louis Sewer District (“District”) in connection with the issuance of its Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A (the “Series 2017A Bonds”). The purpose of the report is to summarize findings of studies performed by Raftelis related to the wastewater system of the District (“System”). The report provides a financial feasibility analysis of the District’s Capital Improvement and Replacement Program (“CIRP”) as it relates to the issuance of the Series 2017A Bonds. The report also addresses other technical and financial issues that affect the operation of the System and the District’s ability to issue and repay wastewater revenue bonds issued during the study period of fiscal years 2016 through 2020. The District’s fiscal year ends on June 30 of each year.

In preparing the report, Raftelis has examined the financial operations of the District through reviews of financial reports, operating and capital budgets, and other statistical and financial information as well as through discussions with the District’s management and financial staff. We have performed various financial tests and analyses necessary to support our findings and opinions.

In the development of the forecast of future financial operations summarized in the report, Raftelis has made certain assumptions with respect to conditions, events, and circumstances which may occur in the future. The methodologies utilized in performing our studies follow generally accepted industry practice. While Raftelis believes such assumptions are reasonable and attainable for the purpose of forecasting the District’s future operations, the actual results may differ materially from the forecasts as influenced by the conditions, events, and circumstances which actually occur.

Subject to the limitations set forth herein, the report is based on information not within the control of Raftelis. Raftelis has not been requested to make an independent analysis, to verify the accuracy of information provided to us, or to render independent judgment of the validity of information provided by others. As such, Raftelis cannot, and does not, guarantee the accuracy thereof to the extent that such information, data, or opinions were based on information provided by others.

Use of the report, or any information contained therein, by a third party shall constitute a waiver and release of Raftelis from and against all claims and liability, including, but not limited to, liability for special, incidental, indirect, or consequential damages in connection with such use. In addition, to the extent permitted by applicable law, use of the report, or any information contained therein by a third party (other than the underwriters of the Series 2017A Bonds), shall constitute an agreement to defend and indemnify Raftelis from and against any claims and liability, including, but not limited to, liability for special, incidental, indirect, or consequential damages in connection with such use. The benefit of such releases, waivers, or limitations of liability shall extend to the related companies and subcontractors of any tier of Raftelis and the directors, officers, partners, employees, and agents of all released or indemnified parties.

Raftelis shall have no liability to a third party for any losses or damages arising from or in any way related to this report and/or the information contained therein. Such express waiver of liability by the third party shall include all claims that the third party may allege in connection with Raftelis' report including, but not limited to, breach of contract, breach of warranty, strict liability, negligence, and/or negligent misrepresentation.

Our principal findings and opinions, which are discussed more fully in the report, are as follows:

### **Wastewater System Financing**

- The District has developed a detailed CIRP required to meet regulatory requirements, maintain the integrity of the System, and continue to address water quality issues. During the five-year study period ("study period") the District plans to spend approximately \$1.7 billion on major capital improvements to the System.
- As shown in Table 3 of the report, capital program requirements are projected to be funded from a combination of available funds on hand, senior and subordinate revenue bond proceeds, annual operating revenues, grants and contributions and interest income. Approximately 25 percent of total major capital improvement expenditures are anticipated to be funded from operating revenues and the drawdown of available fund balances and the remaining approximately 75 percent will be debt financed. Less than one percent of major capital improvements are anticipated to be financed by grants and contributions and interest earned on construction funds.
- The average number of wastewater customers served by the District during fiscal year 2017 was approximately 425,000. Slight decreases in the number of customers are projected during the study period based on analysis of historical trends.
- District revenue is derived principally from charges for wastewater service. The existing schedule of wastewater rates has been in effect since July 1, 2017. The Board adopted these wastewater rates on June 9, 2016 by Ordinance 14395.

- The District has seven senior revenue bond issues currently outstanding (excluding the Series 2017A Bonds) and thirteen subordinate series of revenue bonds issued under the state's revolving fund program ("SRF") and Department of Natural Resources Direct Loan program currently outstanding. The District's previous bond authorizations for senior revenue and subordinate revenue bond issues from elections on February 3, 2004 (\$500 million) and August 5, 2008 (\$275 million) have been fully utilized. Eight bond issues totaling \$897.5 million have been made from the District's bond authorization of \$945 million approved by voters on June 5, 2012. After issuance of the Series 2017A Bonds the District will have exhausted the 2012 Bond Authorization and will have \$747.5 million of remaining bond authorization for senior revenue and subordinate revenue bond issues authorized by voters on April 5, 2016.
- A portion of the proceeds of the Series 2017A Bonds will be used to advance refund a portion of the District's Series 2011B Bonds, Series 2012A Bonds and Series 2013B Bonds. Proceeds will also be used to pay a portion of the costs of the District's CIRP and pay the costs of issuance of the Series 2017A Bonds.
- The Master Bond Ordinance adopted by the Board on April 22, 2004, as supplemented and amended by ordinances adopted by the Board for each bond issue, including the ordinance adopted by the Board for the Series 2017A Bonds (collectively, the "Bond Ordinance"), establishes covenants between the District and bondholders and various terms and conditions related to the Bonds.
- The cash flow analysis of projected wastewater utility revenue and revenue requirements presented in Table 11 of the report shows that projected revenues, including projected revenue increases, will be sufficient to fund the operation and maintenance of the System, provide debt service coverage in excess of the requirements of the Bond Ordinance and continue full funding of the CIRP.
- Based on the financial projections and analyses presented in the report, it is our opinion that the District will be able to adequately finance the CIRP, meet all known cash requirements of the System, and comply with all Bond Ordinance financial and rate covenants during the study period.

### **Bond Covenant Compliance**

- The proposed wastewater charges for fiscal years 2017 through 2020 will allow the District to issue additional revenue bonds within the study period as currently anticipated and make needed improvements and replacements of the System.
- Indicated debt service coverage levels are above the minimum Bond Ordinance requirements.
- The additional bonds test required for the issuance of the Series 2017A Bonds has been met.

## Conclusion

- Based on the financial study performed by Raftelis related to the System, we believe that the District's organizational structure, planned CIRP, and financing plans are sound for purposes of supporting the Series 2017A Bonds and subsequent bonds required to support the full implementation of the CIRP for the 2017 through 2020 fiscal years.

The summary statements presented in this letter do not address all of the issues examined and described in the full report. Accordingly, the findings and conclusions presented herein should not be considered complete except in the context of the detailed descriptions and information contained in the report.

We appreciate the opportunity to be of service to the District in this important matter.

Very truly yours,  
RAFTELIS FINANCIAL CONSULTANTS, INC.



William G. Stannard, PE  
Chairman of the Board

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## Contents

	<u>Page</u>
Introduction.....	D-6
Purpose.....	D-6
Scope.....	D-6
Raftelis Financial Consultants' Qualifications.....	D-7
Wastewater System Financing.....	D-8
Capital Improvement and Replacement Program.....	D-8
CIRP Financing.....	D-10
Wastewater Service Charges .....	D-12
Wastewater Service Charge Components .....	D-12
Other Charges and Fees .....	D-14
Revenues.....	D-15
Customer Growth.....	D-15
Wastewater Volumes .....	D-16
Wastewater Revenues Under Projected Rates .....	D-18
Other Operating Revenues.....	D-19
Revenue Requirements .....	D-20
Operation and Maintenance Expense.....	D-20
Routine Capital Improvements .....	D-22
Cash Financing of Capital Improvements.....	D-22
Debt Service.....	D-22
Operating Reserve Allowance .....	D-24
Financial Analysis.....	D-24
Wastewater Bill Comparison.....	D-27
Bond Covenant Compliance .....	D-29
Rate Covenants .....	D-29
Reasonable Charges.....	D-29
Adequate Maintenance .....	D-30
Additional Bonds Tests.....	D-30
Principal Assumptions .....	D-33

**Report on the Financial Feasibility of  
The Metropolitan St. Louis Sewer District  
Wastewater System Improvement and Refunding  
Revenue Bonds, Series 2017A**

**Introduction**

The Metropolitan St. Louis Sewer District (“District”) is responsible for providing wastewater and stormwater services for the City of St. Louis, Missouri (“City”) and most of St. Louis County, Missouri (“County”). In order to continue to improve and expand its wastewater system (“System”) and maintain compliance with state and federal regulations, the District has developed a major capital improvement and replacement program (“CIRP”). In order to provide for equitable recovery of capital financing costs from existing and future wastewater customers, the District plans to partially finance System improvements through the issuance of long-term debt. The remainder of the funds required to finance the CIRP will be obtained from annual operating revenues, interest income, grants and contributions, and funds on hand.

Revenue bonds are issued pursuant to the District’s Charter, which was approved by the voters of the City and the County at a special election held on February 4, 1954 and amended at special elections held on November 7, 2000 and June 5, 2012 (“Charter”). All bonds are issued under the provisions of the Master Bond Ordinance adopted by the Board of Trustees (“Board”) on April 22, 2004, as supplemented and amended by ordinances adopted by the Board for each bond issue including the ordinance expected to be adopted by the Board on December 5, 2017 (collectively, the “Bond Ordinance”) for the Wastewater System Improvement and Refunding Revenue Bonds, Series 2017A (“Series 2017A Bonds”).

**Purpose**

The purpose of this report is to summarize findings of the financial feasibility study performed by Raftelis Financial Consultants, Inc. (“Raftelis”) related to the System and independently assess the financial feasibility of the District’s issuance of the Series 2017A Bonds. This report addresses financial issues that affect the operation of the System and the District’s ability to issue and repay wastewater revenue bonds.

**Scope**

This report addresses the organization and management of the District. Also included are the results of analyses related to existing and future financial requirements of the System based on a review of financial reports, ordinances, budgets and other information. Information

from these documents was supplemented through meetings and conversations with key District representatives. Projections of revenue and revenue requirements of the System are shown in this report for a study period that includes fiscal years 2017 through 2020.

Evaluation of the financial feasibility of the Series 2017A Bonds is based upon a review of historical financial information provided by the District, an examination of revenue and expenditure projections by District staff and Raftelis, and the preparation of cash flow analyses examining projected System operation and capital programming financing through fiscal year 2020. The level of debt service coverage for the Series 2017A Bonds and subsequent bonds projected to be issued through fiscal year 2020 is determined and compared with requirements of the Bond Ordinance.

### **Raftelis Financial Consultants' Qualifications**

Raftelis was founded in 1993 and has grown to become one of the largest and most respected utility financial, rate, and management consulting firms in the nation. Raftelis has experience providing these services to hundreds of utilities across the country and abroad. Raftelis staff has provided bond feasibility reports for dozens of utilities throughout the United States for billions of dollars in bonds. Raftelis currently has a professional staff of 75 consultants located in eighteen offices throughout the United States providing financial and management consulting services to municipal water and wastewater utilities. Raftelis is a Registered Municipal Advisor with the Securities and Exchange Commission and the Municipal Securities Rulemaking Board.

Raftelis has been working with the District since 2007 as the Consultant to the Rate Commission and was selected by the District in 2012 and 2017 to provide bond feasibility and rate consulting services to the District for a five-year period.

## **Wastewater System Financing**

The general objectives of the District's wastewater CIRP are to provide the facilities necessary to meet federal and state requirements, maintain the integrity of the System, and provide satisfactory levels of service and performance to customers. To accomplish these objectives, the District must have sufficient operating revenues and adequate funding for CIRP projects.

The District uses proceeds of revenue bonds along with wastewater service charge revenues, grants, other revenues and available fund balances to meet the costs of the ongoing CIRP.

### **Capital Improvement and Replacement Program**

Table 1 presents a summary of the projected CIRP for fiscal years 2016 through 2020. These costs were obtained from the District's supplemental budget documents and other data provided by District staff. The costs for projects benefiting special assessment districts are not included in Table 1 since they are fully funded by subdistrict tax revenues and thus do not impact the magnitude of the proposed bonds or required revenue increases.



Table 1: Capital Improvement &amp; Replacement Program

Capital Improvement and Replacement Program Needs	Fiscal Year Ending June 30					2016 - 2020
	<u>FY 2016</u> <i>Actual</i>	<u>FY 2017</u> <i>Actual</i>	<u>FY 2018</u> <i>Projected</i>	<u>FY 2019</u> <i>Projected</i>	<u>FY 2020</u> <i>Projected</i>	Total
1. Asset Management - Capacity	\$ 49,738,000	\$ 50,569,500	\$ 59,807,000	\$ 48,501,000	\$ 58,435,000	\$ 267,050,500
2. Asset Management - Renewal	27,100,400	20,865,000	24,015,000	47,715,000	41,849,000	161,544,400
3. Cityshed	887,000	7,480,000	13,273,000	30,930,000	18,000,000	70,570,000
4. Combined Sewer Overflow	27,496,000	58,759,000	53,535,000	29,032,000	114,368,000	283,190,000
5. Districtwide	6,034,451	7,401,945	7,694,504	8,130,000	7,665,000	36,925,900
6. Other	-	600,000	750,000	-	-	1,350,000
7. Sanitary Sewer Overflow (1)	138,802,000	107,885,000	139,266,000	230,826,000	156,648,000	773,427,000
8. Treatment Plants (2)	<u>7,109,000</u>	<u>4,768,000</u>	<u>21,101,000</u>	<u>15,720,000</u>	<u>21,650,000</u>	<u>70,348,000</u>
9. <i>Subtotal: CIRP</i>	\$ 257,166,851	\$ 258,328,445	\$ 319,441,504	\$ 410,854,000	\$ 418,615,000	\$ 1,664,405,800
10. Less: Capital Funded in O&M (Asset Management)	\$ (12,254,101)	\$ (11,935,861)	\$ (12,538,504)	\$ (9,705,000)	\$ (9,950,000)	\$ (56,383,466)
11. Less: Non-recurring Projects & Studies	(14,833,269)	(2,119,509)	(6,240,000)	(5,240,000)	(5,240,000)	(33,672,778)
12. Less: Project Liquidations	(2,824,905)	(18,513,456)	-	-	-	(21,338,360)
13. Plus: Capitalized Internal Labor	<u>-</u>	<u>6,940,141</u>	<u>7,217,747</u>	<u>7,506,457</u>	<u>7,806,715</u>	<u>29,471,059</u>
14. <i>Total: CIRP Needs (3)</i>	<u>\$ 227,254,576</u>	<u>\$ 232,699,760</u>	<u>\$ 307,880,747</u>	<u>\$ 403,415,457</u>	<u>\$ 411,231,715</u>	<u>\$ 1,582,482,255</u>

(1) The investment is driven by Consent Decree requirements to eliminate at least 85% of all constructed SSO's by 12/31/2023.

(2) The investment is necessary to repair aging infrastructure and to meet regulatory requirements.

(3) CIRP costs for FY 2016 and FY 2017 represent new appropriations approved in that year, and FY 2018 through FY 2020 represent estimated appropriations adjusted for inflation and net of prior years' unspent appropriations released for future use.

The proposed CIRP is primarily focused on collection system improvements projects to meet the District's Consent Decree requirements that include an estimated \$818 million to eliminate sanitary sewer overflows and \$276 million to reduce or eliminate combined sewer overflows. About \$547 million is earmarked for system improvements throughout the District that includes asset management and collection system improvements. Improvements related to existing treatment plants are expected to cost about \$66 million during the five-year study period.

### **CIRP Financing**

Table 2 presents the proposed CIRP financing plan and summarizes the projected source and application of funds over the five-year study period. This plan reflects the recommendations of the Rate Commission and anticipates that proposed capital improvements will be financed from a combination of bond proceeds, annual operating revenues, and interest income.

The District anticipates receiving contributions from Missouri American Water for a share of capacity in the Lower Meramec River Wastewater Treatment Plant. This revenue averaged \$352,008 in FY 2016 and FY 2017 and District staff estimates that this revenue will average about \$629,785 per year for FY 2018-2020. These amounts are shown on Line 8 of Table 2. Interest income earned on invested capital improvement funds is also available to meet capital improvement expenditures. Interest earnings recognize an assumed 0.50 percent average annual interest rate on funds maintained in the construction account. Line 9 indicates the estimated interest income earned on capital improvement program balances.

Table 2: Capital Improvement &amp; Replacement Program Financing Plan

	Fiscal Year Ending June 30					2016 - 2020
	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	Total
	<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	
<u>Sources of Funds</u>						
1. Beginning Year Balance (1)	\$ 43,991,741	\$ 91,546,079	\$ 193,283,435	\$ 195,042,057	\$ 183,024,349	
2. Revenue Bond Proceeds (2,3)	176,727,475	167,678,054	235,356,450	282,453,569	284,214,348	1,146,429,896
3. Cash Financing of Construction (PAYGO)	21,487,214	69,983,620	75,000,000	85,000,000	95,000,000	346,470,834
4. State Revolving Loan Proceeds (3)	75,000,000	95,500,000	-	25,000,000	25,000,000	220,500,000
5. Capitalized Internal Labor	-	-	-	-	-	-
6. Commercial Paper	-	-	-	-	-	-
7. Line of Credit	-	-	-	-	-	-
8. Grants & Contributions	100,826	603,189	602,919	629,397	657,040	2,593,371
9. Interest Income	<u>3,276,731</u>	<u>2,621,780</u>	<u>680,000</u>	<u>970,000</u>	<u>940,000</u>	8,488,512
10. <i>Subtotal: Available Funds</i>	\$ 320,583,988	\$ 427,932,722	\$ 504,922,804	\$ 589,095,023	\$ 588,835,737	
<u>Uses of Funds</u>						
11. Major Capital Improvements	\$ (227,254,576)	\$ (232,699,760)	\$ (307,880,747)	\$ (403,415,457)	\$ (411,231,715)	\$ (1,582,482,255)
12. Issuance Costs	(1,783,332)	(1,949,527)	(2,000,000)	(2,655,218)	(2,712,010)	(11,100,087)
13. Commercial Paper & Line of Credit Payments	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	-
14. <i>Subtotal: Uses of Funds</i>	\$ (229,037,909)	\$ (234,649,287)	\$ (309,880,747)	\$ (406,070,675)	\$ (413,943,725)	
15. <i>End of Year Balance</i>	\$ 91,546,079	\$ 193,283,435	\$ 195,042,057	\$ 183,024,349	\$ 174,892,012	

(1) Includes balance in Sanitary Replacement Fund, Project Bond Funds, WW OMCI and Construction Funds, Capital Improvement Surcharge Fund, and the Bond Place Special Taxing Subdistrict Fund.

(2) Assumes par amount issued of \$200M in FY 2018, \$248.7M in FY 2019, and \$254.9M in FY 2020.

(3) Issuance costs are included in the total proceeds shown.

## **Wastewater Service Charges**

Table 3 presents a summary of the District-wide charges imposed by the District since the beginning of fiscal year 2012 as well as the proposed charges for the forecast period.

### ***Wastewater Service Charge Components***

The current wastewater rates were adopted on June 9, 2016 and became effective on July 1, 2016, with rate increases that took effect on July 1, 2016 and July 1, 2017 and a schedule of rate increases to take effect on July 1, 2018, and July 1, 2019. These rates are part of the fifth set of rates to go through the Rate Commission review procedures mandated by the Charter.

The rates consist of a monthly base charge, a uniform volume charge, and extra strength surcharges for biochemical oxygen demand (“BOD”) in excess of 300 milligrams per liter (“mg/l”) or chemical oxygen demand (“COD”) in excess of 600 mg/l, and suspended solids (“SS”) in excess of 300 mg/l. The base charge includes a billing and collection charge component and a system availability charge component that are applicable to all customer classes. A compliance charge is applied to non-residential customers, in addition to the base charge, to recover monitoring and pretreatment program related costs. As a part of the 2011 Rate Commission proceedings, the District further differentiated the compliance charge into tiers to better reflect the cost of providing these services to different non-residential customers served by the District.

**Table 3. Historical and Projected Wastewater Rates**

	Fiscal Year Ending June 30								
	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Current</i>	<i>Approved</i>	<i>Approved</i>
<u>Base Charge (\$/Bill)</u>									
Billing & Collection Charge	\$ 2.65	\$ 3.25	\$ 3.45	\$ 3.55	\$ 3.70	\$ 5.44	\$ 6.02	\$ 6.67	\$ 7.38
System Availability Charge	\$ 9.20	\$ 9.90	\$ 11.40	\$ 12.70	\$ 14.55	\$ 14.02	\$ 15.50	\$ 17.16	\$ 18.97
Total: Base Charge	\$ 11.85	\$ 13.15	\$ 14.85	\$ 16.25	\$ 18.25	\$ 19.46	\$ 21.52	\$ 23.83	\$ 26.35
 Compliance Charge (\$/Bill) (b)									
Tier 1	\$ 31.95	\$ 23.00	\$ 16.00	\$ 9.00	\$ 2.15	\$ 2.86	\$ 2.95	\$ 3.05	\$ 3.14
Tier 2	\$ 31.95	\$ 39.80	\$ 41.85	\$ 43.55	\$ 44.50	\$ 57.20	\$ 58.94	\$ 60.89	\$ 62.61
Tier 3	\$ 31.95	\$ 84.75	\$ 89.15	\$ 92.75	\$ 94.80	\$ 125.84	\$ 129.67	\$ 133.96	\$ 137.75
Tier 4	\$ 31.95	\$ 124.25	\$ 130.70	\$ 136.00	\$ 139.00	\$ 185.90	\$ 191.56	\$ 197.90	\$ 203.49
Tier 5	\$ 31.95	\$ 163.75	\$ 172.25	\$ 179.25	\$ 183.15	\$ 243.10	\$ 250.50	\$ 258.79	\$ 266.10
 <u>Volume Charge</u>									
Metered (\$/Ccf)	\$ 2.11	\$ 2.28	\$ 2.50	\$ 2.82	\$ 3.21	\$ 3.59	\$ 3.97	\$ 4.40	\$ 4.87
Unmetered (\$/Bill)									
Per Room	\$ 1.38	\$ 1.48	\$ 1.63	\$ 1.83	\$ 2.09	\$ 2.12	\$ 2.35	\$ 2.61	\$ 2.89
Per Water Closet	\$ 5.15	\$ 5.56	\$ 6.10	\$ 6.88	\$ 7.83	\$ 7.92	\$ 8.76	\$ 9.70	\$ 10.72
Per Bath	\$ 4.30	\$ 4.64	\$ 5.08	\$ 5.73	\$ 6.53	\$ 6.60	\$ 7.30	\$ 8.08	\$ 8.93
Per Separate Shower	\$ 4.30	\$ 4.64	\$ 5.08	\$ 5.73	\$ 6.53	\$ 6.60	\$ 7.30	\$ 8.08	\$ 8.93
 <u>Extra Strength Surcharges (\$/ton) (b)</u>									
Suspended Solids over 300 mg/l	\$ 231.35	\$ 231.35	\$ 231.35	\$ 244.03	\$ 251.88	\$ 262.00	\$ 269.07	\$ 277.03	\$ 283.87
Biochemical Oxygen Demand over 300 mg/l	\$ 620.14	\$ 620.14	\$ 620.14	\$ 620.14	\$ 632.38	\$ 654.00	\$ 671.63	\$ 691.50	\$ 708.56
Chemical Oxygen Demand over 600 mg/l	\$ 310.07	\$ 310.07	\$ 310.07	\$ 310.07	\$ 316.19	\$ 327.00	\$ 335.82	\$ 345.76	\$ 354.30

Ccf = hundred cubic feet (approx. 748 gallons)

mg/l = milligram per liter

***Other Charges and Fees***

In addition to the normal and excess strength wastewater service charges, the District also imposes a number of other charges to meet cost related to growth and system operations. The District imposes District-wide sewer system connection fees per Ordinance 9346 adopted in 1994. Under this system of capital recovery charges, new customers buy into the wastewater system so that they are on an equal equity basis with customers having similar service requirements. The current charge is based on a unit equity value of \$2.96 per gallon of wastewater per day attributed to each new customer. For all single family residential customers, the sewer system connection fee is \$1,072. For non-residential customers, the charge varies from \$1,072 for customers served by a 5/8 or 3/4-inch water meter to \$82,655 for customers served by a 10-inch water meter. Multifamily customers have the option to be billed on a flat \$713 per unit basis or on the standard meter size basis.

A \$0.08 per gallon charge for septage or other wastewater hauled to the Bissell Wastewater Treatment Plant is imposed on all permitted waste haulers that serve customers having septic tanks, cesspools, private treatment facilities, or customers otherwise not connected to the District's sewer system per Ordinance 12716, adopted on August 14, 2008. Costs incurred for sampling and testing wastewater samples from industrial users are recovered by a system of wastewater monitoring fees. These fees are typically published in ordinances updating the wastewater service charges. A number of engineering and service fees are also applied to reimburse the District for various services such as plan review, construction permits, construction related inspections, machine taps, project bid fees, provision of blueprint and microfilm copies, and permitting pretreatment customers.

## Revenues

District revenue is derived primarily from charges for wastewater service, including revenues from extra strength surcharges. Other sources of income include dedicated subdistrict assessments, connection fees, waste hauler permits, industrial monitoring charges, various engineering fees, interest earnings, late charges and other operating income.

### Customer Growth

Table 4 presents a summary of the historical and projected average number of wastewater customers served by the District. All customer projections are based on an analysis of historic growth patterns by customer class during the past five years. As indicated by Table 4, the number of metered customers is projected to decrease from 347,100 in 2016 to 346,077 in 2020 and the number of unmetered customers is projected to decrease from 77,600 in 2016 to 77,400 in 2020. The total number of customer accounts is expected to decrease at an average rate of 0.1 percent per year over the study period.

**Table 4. Historical and Projected Average Customer Accounts**

		<b>Fiscal Year Ending June 30</b>				
		<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2019</u></b>	<b><u>FY 2020</u></b>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<u>Metered Customers</u>						
1.	Single Family	302,000	302,600	302,237	301,874	301,512
2.	Multi-Family	20,800	20,700	20,700	20,700	20,700
3.	Non-Residential	<u>24,300</u>	<u>24,300</u>	<u>24,154</u>	<u>24,009</u>	<u>23,865</u>
4.	<i>Subtotal: Metered Customers</i>	347,100	347,600	347,091	346,583	346,077
<u>Unmetered Customers</u>						
5.	Single Family	56,600	56,600	56,600	56,600	56,600
6.	Multi-Family	21,000	20,800	20,800	20,800	20,800
7.	Non-Residential	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
8.	<i>Subtotal: Unmetered Customers</i>	77,600	77,400	77,400	77,400	77,400
<u>Total Customer Accounts</u>						
9.	Single Family	358,600	359,200	358,837	358,474	358,112
10.	Multi-Family	41,800	41,500	41,500	41,500	41,500
11.	Non-Residential	<u>24,300</u>	<u>24,300</u>	<u>24,154</u>	<u>24,009</u>	<u>23,865</u>
12.	<i>Total: Customer Accounts</i>	424,700	425,000	424,491	423,983	423,477
13.	% Change	0.4%	0.1%	-0.1%	-0.1%	-0.1%

***Wastewater Volumes***

Table 5 presents a summary of historical and projected contributed or billed wastewater volumes. Billed wastewater volume is the amount of wastewater flow contributed to the System by residential and non-residential customers. The determination of contributed wastewater volume for unmetered residential customers is based on an analysis of customers with similar characteristics using statistical methods and was updated in the past two years for the most recent Rate Change Proposal. The indicated unit volumes which became effective on July 1, 2016 are shown along with the current allowance below:

- 14.5 gallons per day (“gpd”) for each room
- 54.2 gpd for each water closet
- 45.2 gpd for each bath or separate shower

Billable wastewater volumes for all single family customers with metered water usage are determined on the basis of water used during the period best equated to contributed wastewater volume. For District customers, this period is from January 15 through April 30. Billed wastewater volume for non-residential customers is equal to actual metered water usage less exemption allowances for any water that does not enter the sewer system. Multifamily customers are either billed based on actual annual water usage or the average annual water usage established during the best equated period for wastewater contribution, depending on the billing method selected by each multifamily customer. The selected billing basis is permanent and cannot be changed. Projected volumes are based on the recognition of historical billing volumes and trends. Also considered are projections of numbers of customers and average historic billed volume per customer.



Table 5. Historical and Projected Contributed Wastewater Volumes (Ccf)

		Fiscal Year Ending June 30				
		<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<u>Metered Customers (1)</u>						
1.	Single Family	21,749,859	21,446,644	21,151,781	20,971,420	20,798,783
2.	Multi-Family	7,955,270	8,065,394	7,945,141	7,866,536	7,788,877
3.	Non-Residential	<u>21,159,685</u>	<u>21,583,016</u>	<u>21,259,271</u>	<u>21,046,678</u>	<u>20,836,211</u>
4.	<i>Subtotal: Metered Customers</i>	50,864,814	51,095,054	50,356,193	49,884,634	49,423,871
<u>Unmetered Customers</u>						
5.	Single Family	6,847,008	6,246,081	6,253,671	6,275,428	6,301,319
6.	Multi-Family	4,502,587	4,076,529	4,085,051	4,095,191	4,107,257
7.	Non-Residential	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
8.	<i>Subtotal: Unmetered Customers</i>	11,349,595	10,322,610	10,338,722	10,370,619	10,408,576
<u>Total Contributed Wastewater Volume</u>						
9.	Single Family	28,596,867	27,692,725	27,405,452	27,246,848	27,100,102
10.	Multi-Family	12,457,857	12,141,923	12,030,192	11,961,727	11,896,134
11.	Non-Residential	<u>21,159,685</u>	<u>21,583,016</u>	<u>21,259,271</u>	<u>21,046,678</u>	<u>20,836,211</u>
12.	<i>Total: Contributed Volumes</i>	62,214,409	61,417,664	60,694,915	60,255,253	59,832,447
13.	% Change	-3.7%	-1.3%	-1.2%	-0.7%	-0.7%

***Wastewater Revenues Under Projected Rates***

A summary of historical revenues for fiscal years 2016 and 2017 and projected wastewater revenues under approved rates for fiscal years 2018 through 2020 is presented in Table 6. Projected billed wastewater revenues do not include allowances for bad debt, refunds or billing adjustments. These billing adjustments are included with other operating revenues in Table 7.

**Table 6. Historical and Projected Wastewater Revenues under Approved Rates**

		<b>Fiscal Year Ending June 30</b>				
		<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2019</u></b>	<b><u>FY 2020</u></b>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<u>Metered</u>						
1.	Residential	\$ 178,703,827	\$ 195,548,132	\$ 216,320,592	\$ 217,800,756	\$ 239,458,348
	Non-Residential					
2.	Normal Strength	78,068,922	87,158,091	95,708,868	101,973,318	111,570,887
3.	Extra Strength	<u>6,166,873</u>	<u>5,837,918</u>	<u>6,605,077</u>	<u>6,596,851</u>	<u>6,759,639</u>
4.	<i>Subtotal: Metered Customers</i>	\$ 262,939,622	\$ 288,544,141	\$ 318,634,537	\$ 326,370,924	\$ 357,788,873
<u>Unmetered</u>						
5.	Residential	\$ 35,529,802	\$ 36,373,560	\$ 40,404,488	\$ 66,789,983	\$ 73,813,513
<u>Total Wastewater Revenues</u>						
6.	Residential	\$ 214,233,629	\$ 231,921,692	\$ 256,725,080	\$ 284,590,738	\$ 313,271,861
7.	Non-Residential	<u>84,235,795</u>	<u>92,996,009</u>	<u>102,313,945</u>	<u>108,570,169</u>	<u>118,330,525</u>
8.	<i>Total: Wastewater Revenues</i>	\$ 298,469,424	\$ 324,917,701	\$ 359,039,025	\$ 393,160,907	\$ 431,602,386
9.	% Change	-	8.9%	10.5%	9.5%	9.8%

***Other Operating Revenues***

Projected other wastewater utility revenues are presented in Table 7. These revenues are grouped in the same manner as summarized in the District's budget documents. All of these revenues are used to offset operating costs.

Table 7. Projected Other Wastewater Operating Revenues

		Fiscal Year Ending June 30				
		<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<u>Other Operating Revenue</u>						
1.	Billing Adjustments (1)	\$ 6,215,605	\$ 5,965,792	\$ 3,844,900	\$ 4,186,602	\$ 4,565,861
2.	Bad Debt Provision	(4,062,990)	(2,534,814)	(2,460,000)	(2,706,105)	(2,962,019)
Other Fees						
3.	Construction Inspection Fees	\$ 746,766	\$ 632,810	\$ 638,000	\$ 638,000	\$ 638,000
4.	Waste Hauler Fees	975,537	771,234	650,000	650,000	650,000
5.	All Other Fees (2)	603,743	582,226	487,000	487,000	487,000
6.	<i>Subtotal: Other Fees</i>	<u>\$ 2,326,045</u>	<u>\$ 1,986,271</u>	<u>\$ 1,775,000</u>	<u>\$ 1,775,000</u>	<u>\$ 1,775,000</u>
7.	Miscellaneous Revenues (3)	14,272,476	1,655,245	1,320,000	1,957,357	1,452,157
8.	<i>Subtotal: Other Operating Revenue</i>	<u>\$ 18,751,137</u>	<u>\$ 7,072,494</u>	<u>\$ 4,479,900</u>	<u>\$ 5,212,854</u>	<u>\$ 4,830,999</u>
9.	Other Non-Operating Revenue (4)	(207,013)	(516,280)	300,000	300,000	300,000
10.	Connection Fee Revenue	1,242,782	1,479,483	1,217,000	1,229,170	1,241,462
11.	<b>Total: Other Miscellaneous Revenue</b>	<b>\$ 19,786,906</b>	<b>\$ 8,035,697</b>	<b>\$ 5,996,900</b>	<b>\$ 6,742,024</b>	<b>\$ 6,372,460</b>
	% Change		-59.4%	-25.4%	12.4%	-5.5%

(1) Includes late charges, refunds, adjustments, lien interest and fees, and other adjustments, including revenue from Missouri American Water.

(2) Includes plan review fees, submittal fees, monitoring cost fees, pretreatment discharge permits, and all other fees.

(3) Includes reimbursements, reimbursable engineering and maintenance, and all other miscellaneous revenue.

(4) Includes rental income, clean water surcharge, and sale of fixed assets.

## **Revenue Requirements**

The revenue required to provide for the continued operation of the District must be sufficient to meet the cash requirements for System operation. Revenue requirements include (1) total System operation and maintenance expenses; (2) expenditures for routine and major capital improvements met directly from revenues; (3) total System debt service (consisting of principal and interest payments); and (4) provision for an adequate operating reserve. Projections of the cash requirements to meet these System expenditures for the period of 2018 through 2020 from the rates approved by the Board for fiscal years 2016 through 2020 are presented in this section.

### ***Operation and Maintenance Expense***

Operation and maintenance expense includes the total annual salaries and wages of District personnel, costs for materials and supplies, fuel and electrical power costs and other costs such as employee benefits, insurance, and contract services. Since these costs are an ongoing annual obligation of the District, they are met from wastewater and stormwater operating revenues as they are incurred. A summary of actual and projected wastewater related operation and maintenance expense for the period 2016 through 2020 is presented in Table 9. Wastewater related operation and maintenance expense for fiscal years 2016 and 2017 are actual results while fiscal years 2018 through 2020 are based on the fiscal year 2017 actual results using the escalation rates as documented in the most recent Rate Change Proposal.

Table 8. Projected Wastewater Operating Costs

Operating Expenses		Fiscal Year Ending June 30				
		<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<u>General Fund Expenses</u>						
1.	Board of Trustees	\$ 2,000	\$ 2,043	\$ 6,100	\$ 6,222	\$ 6,346
2.	Rate Commission	116,788	9,962	594,304	606,190	618,314
3.	Civil Service Commission	1,404	493	1,000	1,000	1,000
4.	Secretary - Treasurer	1,920,882	1,616,851	2,016,483	2,068,338	2,121,120
5.	Executive Director	1,279,948	1,428,906	2,779,647	2,849,063	2,919,664
6.	General Counsel	2,321,411	2,715,945	2,513,527	2,574,292	2,635,888
7.	Office of Human Resources	8,172,323	8,237,769	9,217,944	9,590,102	9,979,377
8.	Engineering (1, 2)	11,228,085	11,360,028	11,870,176	12,265,650	12,665,948
9.	Finance	18,851,261	18,515,300	19,196,796	19,643,168	20,098,602
10.	Information Systems	11,557,343	12,523,627	12,934,438	13,282,974	13,632,451
<u>Operations</u>						
11.	Collection System	25,758,986	25,970,493	26,683,163	27,583,267	28,505,256
12.	Pump Stations	13,281,615	13,063,168	11,175,486	11,567,597	11,973,052
13.	Wastewater Treatment	45,818,205	47,139,869	45,449,921	46,988,190	48,577,913
14.	Support	<u>7,532,580</u>	<u>7,506,017</u>	<u>12,745,857</u>	<u>13,058,933</u>	<u>13,377,625</u>
15.	<i>Subtotal: Operations</i>	<u>\$ 92,391,387</u>	<u>\$ 93,679,546</u>	<u>\$ 96,054,427</u>	<u>\$ 99,197,987</u>	<u>\$ 102,433,845</u>
16.	<i>Subtotal: General Fund Expenses</i>	<u>\$ 147,842,830</u>	<u>\$ 150,090,470</u>	<u>\$ 157,184,843</u>	<u>\$ 162,084,986</u>	<u>\$ 167,112,555</u>
<u>Other Operating Expenses</u>						
17.	Water Backup Program	\$ 7,631,197	\$ 5,035,020	\$ 3,801,300	\$ 3,877,326	\$ 3,954,873
18.	General Insurance Fund (3)	7,520,215	6,205,023	5,825,500	5,949,179	6,074,378
19.	Capital Funded in O&M (Asset Management)	12,968,746	14,142,928	12,538,504	9,705,000	9,950,000
20.	Capitalized Internal Labor	<u>(7,704,858)</u>	<u>(6,637,765)</u>	<u>(7,217,747)</u>	<u>(7,506,457)</u>	<u>(7,806,715)</u>
21.	<i>Subtotal: Other Operating Expenses</i>	<u>\$ 20,415,301</u>	<u>\$ 18,745,206</u>	<u>\$ 14,947,557</u>	<u>\$ 12,025,048</u>	<u>\$ 12,172,535</u>
22.	<i>Subtotal: Operating Expenses</i>	<u>\$ 168,258,131</u>	<u>\$ 168,835,675</u>	<u>\$ 172,132,400</u>	<u>\$ 174,110,034</u>	<u>\$ 179,285,090</u>
23.	Additional O&M (3)	-	-	-	-	-
24.	<b>Total: Operating Expenses (O&amp;M)</b>	<b>\$ 168,258,131</b>	<b>\$ 168,835,675</b>	<b>\$ 172,132,400</b>	<b>\$ 174,110,034</b>	<b>\$ 179,285,090</b>
<u>Capital Outlay</u>						
25.	Routine Annual Capital Improvements/Outlay	\$ 1,299,400	\$ 1,213,085	\$ 5,166,301	\$ 5,269,627	\$ 5,375,019
26.	Non-recurring Projects & Studies	<u>11,000,403</u>	<u>2,119,509</u>	<u>6,240,000</u>	<u>5,240,000</u>	<u>5,240,000</u>
27.	<b>Total: Operating Expenses + Capital Outlay</b>	<b>\$ 180,557,934</b>	<b>\$ 172,168,270</b>	<b>\$ 183,538,701</b>	<b>\$ 184,619,661</b>	<b>\$ 189,900,109</b>

(1) Engineering expenses include capitalized internal labor associated with the Capital Improvement and Replacement Program.

The amount of this capitalized labor is backed out of the operating expenses, as shown on line 20.

(2) The engineering expenses include costs from the Environmental Compliance cost center. These costs are presented on the Wastewater Treatment line of the audited segmented financial statements.

(3) Excludes non-cash expenses related to GASB 68 pension expense of \$3.1 million and \$6.0 million in FY 2016 and FY 2017, respectively.

### ***Routine Capital Improvements***

Expenditures for routine annual capital improvements include those costs that tend to be routinely incurred each year for normal replacements such as vehicles and office equipment, and minor improvements or repairs. Since the costs of these improvements are a continuing expense to be met each year, the District appropriately finances these expenditures from current wastewater revenues. These expenditures are included in the District's annual budgets as Capital Outlay costs.

### ***Cash Financing of Capital Improvements***

In addition to cash financing routine capital improvements, the District partially finances major capital improvements on a cash or pay-as-you-go basis. The District is expected to continue to cash finance all routine capital improvements and a portion of the CIRP. The amount of projected cash financing of the major capital improvement program was previously identified on Line 3 of Table 3.

### ***Debt Service***

The District issued its first District-wide series of revenue bonds in April 2004 and additional Senior Bonds were issued in November 2006, November 2008, January 2010, December 2011, August 2012, November 2012, December 2013, December 2015, and December 2016 with the 2010 issue being issued under the Build America Bond federally subsidized program. Total Senior Bonds issued to date total \$1,292,835,000 as indicated by the adjoining table. The District has also issued thirteen subordinate series of revenue bonds through the Missouri State Revolving Fund ("SRF") and Department of Natural Resources Direct Loan program. The total amount of Subordinate Bonds issued to date is \$595,250,000.

Additional revenue bonds are assumed to have 30-year terms and with annual bond yields ranging from 3.65 percent to 4.85 percent for fiscal years 2017 through 2020. Additional revenue bonds issued as part of the SRF loan

### **Existing Debt Issues**

<b>Series</b>	<b>Amount</b>
<b><u>Revenue Bonds</u></b>	
2004A (1)	\$ 175,000,000
2006C (2)	\$ 60,000,000
2008A (2)	\$ 30,000,000
2010B	\$ 85,000,000
2011B	\$ 52,250,000
2012A	\$ 225,000,000
2012B (1)	\$ 141,730,000
2013B	\$ 150,000,000
2015B (2)	\$ 223,855,000
2016C	\$ 150,000,000
<b>Total</b>	<b>\$ 1,292,835,000</b>
<b><u>State Revolving Fund Loans</u></b>	
2004B	\$ 161,280,000
2005A	\$ 6,800,000
2006A	\$ 42,715,000
2006B	\$ 14,205,000
2008B	\$ 40,000,000
2009A	\$ 23,000,000
2010A	\$ 7,980,700
2010C	\$ 37,000,000
2011A	\$ 39,769,300
2013A	\$ 52,000,000
2015A	\$ 75,000,000
2016A	\$ 20,000,000
2016B	\$ 75,500,000
<b>Total</b>	<b>\$ 595,250,000</b>

(1) The Series 2012B Bonds refunded \$159,090,000 principal amount of the Series 2004A Bonds. The Series 2004A Bonds are now completely paid off.

(2) The Series 2015B Bonds completely refunded the Series 2006C and 2008A Bonds in addition to providing new funds for construction.

program are expected to have 20-year terms and a net effective annual interest and administration cost of about 2.75 percent per year. Table 9 presents debt service in two ways, by Payments to Sinking Fund, which is used for modeling the District's cash flow in Table 10, and Payments to Bondholders, which is used to determine coverage in accordance with the District's bond covenants. The Payments to Bondholders for FY 2018 through FY 2020 shown in Table 9 was provided by the District's Financial Advisor, PFM Financial Advisors, LLC.

The scheduling of the proposed revenue bond issues and SRF loans reflects current planning considerations, as recognized for purposes of this report. This is not intended to preclude the possible modification or rescheduling of issues, if desirable, due to market conditions, local financing policy, or other practical considerations.

**Table 9. Projected Debt Service Requirements**

	<b>Fiscal Year Ending June 30</b>				
	<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2019</u></b>	<b><u>FY 2020</u></b>
	<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<b>Payments to Sinking Fund</b>					
<u>Revenue Bonds</u>					
Existing	\$ 48,343,949	\$ 59,313,787	\$ 65,008,062	\$ 65,013,473	\$ 65,072,289
Projected	-	-	5,222,407	19,638,061	36,151,931
<i>Subtotal: Revenue Bonds</i>	\$ 48,343,949	\$ 59,313,787	\$ 70,230,470	\$ 84,651,533	\$ 101,224,220
<u>SRF Loans</u>					
Existing	\$ 29,536,482	\$ 32,847,937	\$ 32,632,336	\$ 32,896,158	\$ 32,952,108
Projected	-	-	-	513,250	1,959,375
<i>Subtotal: SRF Loans</i>	\$ 29,536,482	\$ 32,847,937	\$ 32,632,336	\$ 33,409,408	\$ 34,911,483
<i>Total: Debt Service to Sinking Fund</i>	<b>\$ 77,880,432</b>	<b>\$ 92,161,724</b>	<b>\$ 102,862,806</b>	<b>\$ 118,060,941</b>	<b>\$ 136,135,703</b>
<b>Payments to Bondholders</b>					
<u>Revenue Bonds</u>					
Existing	\$ 46,377,835	\$ 58,182,077	\$ 65,010,110	\$ 64,997,823	\$ 65,091,723
Projected	-	-	3,638,889	17,666,323	34,132,967
<i>Subtotal: Revenue Bonds</i>	\$ 46,377,835	\$ 58,182,077	\$ 68,648,999	\$ 82,664,145	\$ 99,224,690
<u>SRF Loans</u>					
Existing	\$ 27,378,273	\$ 31,178,492	\$ 33,029,113	\$ 37,235,313	\$ 37,321,966
Projected	-	-	-	-	1,026,500
<i>Subtotal: SRF Loans</i>	\$ 27,378,273	\$ 31,178,492	\$ 33,029,113	\$ 37,235,313	\$ 38,348,466
<i>Total: Debt Service to Bondholders</i>	<b>\$ 73,756,108</b>	<b>\$ 89,360,569</b>	<b>\$ 101,678,112</b>	<b>\$ 119,899,458</b>	<b>\$ 137,573,156</b>

## **Operating Reserve Allowance**

The operating reserve allowance is a recommended balance to accommodate fluctuations in annual revenues and expenditures. The existing revenue bond covenants require the District to maintain a minimum balance equal to 45 days of operation and maintenance expense. For this report, an operating reserve allowance equal to 60 days or about 16.4 percent of annual operating expense is assumed to be maintained, as provided by the current budget. Operating expense, as routinely presented in the District's annual budgets, is equal to the sum of operation and maintenance expense and routine annual capital improvements. The operating reserve for wastewater operations is projected to increase to about \$58.1 million in fiscal year 2020 through revenues set aside to maintain a 60-day operating reserve allowance.

## **Financial Analysis**

A pro forma cash flow statement showing projected wastewater revenues and revenue requirements for the District during the study period is presented in Table 10. System revenues must be at least sufficient to finance the costs of operation and maintenance expense, routine annual capital improvements, and debt service costs on existing and proposed debt, while maintaining adequate operating reserve funds and complying with all revenue bond debt service coverage requirements. Annual revenues can also be used to finance a portion of the major capital improvement program.

Table 10 presents annual wastewater revenues and expenditures under the District's approved rates for the study period. Line 1 of Table 10 shows projected revenue under the approved rates for each year of the study period.



Table 10. Comparison of Projected Wastewater Revenue with Projected Revenue Requirements

		Fiscal Year Ending June 30				
		<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<b>Wastewater Revenue</b>						
1	User Charge Revenue (1)	\$ 298,469,424	\$ 324,917,701	\$ 359,039,025	\$ 393,160,907	\$ 431,602,386
	Other Miscellaneous Revenue					
2.	Other Operating Revenue	\$ 18,751,137	\$ 7,072,494	\$ 4,479,900	\$ 5,212,854	\$ 4,830,999
3.	Connection Fee Revenue	<u>1,242,782</u>	<u>1,479,483</u>	<u>1,217,000</u>	<u>1,229,170</u>	<u>1,241,462</u>
4.	<i>Subtotal: Other Miscellaneous Revenue</i>	\$ 19,993,919	\$ 8,551,977	\$ 5,696,900	\$ 6,442,024	\$ 6,072,460
5.	Interest Income - Reserve Funds	251,952	251,952	251,952	251,952	251,952
6.	Interest Income - Other (2)	<u>3,642,352</u>	<u>2,204,725</u>	<u>2,279,035</u>	<u>2,279,035</u>	<u>2,279,035</u>
7.	<b>Total: Wastewater Revenue</b>	<b>\$ 322,357,647</b>	<b>\$ 335,926,355</b>	<b>\$ 367,266,912</b>	<b>\$ 402,133,918</b>	<b>\$ 440,205,834</b>
<b>Operating Expenses</b>						
8.	General Fund Operating Expenses	\$ 147,842,830	\$ 150,090,470	\$ 157,184,843	\$ 162,084,986	\$ 167,112,555
9.	Other Operating Expenses	<u>20,415,301</u>	<u>18,745,206</u>	<u>14,947,557</u>	<u>12,025,048</u>	<u>12,172,535</u>
10.	<b>Subtotal: Operating Expenses (O&amp;M)</b>	<b>\$ 168,258,131</b>	<b>\$ 168,835,675</b>	<b>\$ 172,132,400</b>	<b>\$ 174,110,034</b>	<b>\$ 179,285,090</b>
11.	<b>Net Revenue Available for Debt Service</b>	<b>\$ 154,099,516</b>	<b>\$ 167,090,679</b>	<b>\$ 195,134,512</b>	<b>\$ 228,023,884</b>	<b>\$ 260,920,744</b>
<b>Debt Service (Payments to Sinking Fund)</b>						
<u>Revenue Bonds</u>						
12.	Existing	\$ 48,343,949	\$ 59,313,787	\$ 65,008,062	\$ 65,013,473	\$ 65,072,289
13.	Projected	<u>-</u>	<u>-</u>	<u>5,222,407</u>	<u>19,638,061</u>	<u>36,151,931</u>
14.	<b>Subtotal: Revenue Bonds</b>	<b>\$ 48,343,949</b>	<b>\$ 59,313,787</b>	<b>\$ 70,230,470</b>	<b>\$ 84,651,533</b>	<b>\$ 101,224,220</b>
<u>SRF Loans</u>						
15.	Existing	\$ 29,536,482	\$ 32,847,937	\$ 32,632,336	\$ 32,896,158	\$ 32,952,108
16.	Projected	<u>-</u>	<u>-</u>	<u>-</u>	<u>513,250</u>	<u>1,959,375</u>
17.	<b>Subtotal: SRF Loans</b>	<b>\$ 29,536,482</b>	<b>\$ 32,847,937</b>	<b>\$ 32,632,336</b>	<b>\$ 33,409,408</b>	<b>\$ 34,911,483</b>
18.	<b>Total: Debt Service</b>	<b>\$ 77,880,432</b>	<b>\$ 92,161,724</b>	<b>\$ 102,862,806</b>	<b>\$ 118,060,941</b>	<b>\$ 136,135,703</b>
<b>Other Revenues and Expenditures</b>						
19.	Other Non-Operating Revenue	\$ (207,013)	\$ (516,280)	\$ 300,000	\$ 300,000	\$ 300,000
20.	Routine Annual Capital Improvements	1,299,400	1,213,085	5,166,301	5,269,627	5,375,019
21.	Cash Financing of Major Capital Improvements	21,487,214	69,983,620	75,000,000	85,000,000	95,000,000
22.	Non-recurring Projects & Studies	14,833,269	2,119,509	6,240,000	5,240,000	5,240,000
23.	Commercial Paper & Line of Credit Payments	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
24.	<b>Subtotal: Other Expenditures</b>	<b>\$ 37,619,884</b>	<b>\$ 73,316,214</b>	<b>\$ 86,406,301</b>	<b>\$ 95,509,627</b>	<b>\$ 105,615,019</b>
25.	<b>Net Annual Balance (3)</b>	<b>\$ 38,392,188</b>	<b>\$ 1,096,460</b>	<b>\$ 6,165,405</b>	<b>\$ 14,753,316</b>	<b>\$ 19,470,022</b>
26.	Beginning Balance (4)	\$ 41,654,227	\$ 55,590,610	\$ 56,687,070	\$ 62,852,475	\$ 77,605,791
27.	Ending Balance (4)	80,046,415	56,687,070	62,852,475	77,605,791	97,075,813
<b>Debt Service (Payments to Bondholders)</b>						
28.	Revenue Bonds	\$ 46,377,835	\$ 58,182,077	\$ 68,648,999	\$ 82,664,145	\$ 99,224,690
29.	SRF Loans	<u>27,378,273</u>	<u>31,178,492</u>	<u>33,029,113</u>	<u>37,235,313</u>	<u>38,348,466</u>
30.	<b>Total: Debt Service</b>	<b>\$ 73,756,108</b>	<b>\$ 89,360,569</b>	<b>\$ 101,678,112</b>	<b>\$ 119,899,458</b>	<b>\$ 137,573,156</b>
<b>Debt Service Coverage</b>						
31.	Revenue Bonds	<u>3.32</u>	<u>2.87</u>	<u>2.84</u>	<u>2.76</u>	<u>2.63</u>
32.	Total Debt	<u>2.09</u>	<u>1.87</u>	<u>1.92</u>	<u>1.90</u>	<u>1.90</u>

(1) Includes interest earned from the Missouri American Water Loan.

(2) Net Annual Balance is Net Revenue Available for Debt Service (Line 11) less Debt Service and Other Expenditures (Lines 18 and 26) plus Other Non-Operating Revenue (Line 19).

(3) Includes funds set aside for a minimum operating reserve equal to 60 days of operating expenses.

As indicated on Lines 2 and 3 of Table 10, other operating revenue and connection fee revenue, previously projected in Table 7, are available for the wastewater system. Projected revenue from District-wide connection fees are expended as part of the cash financing of major improvements line item (Line 21), which is also shown as Line 3 of Table 2. Interest income that is available from restricted or reserve funds for operating purposes is shown on Line 5 of Table 10. Interest earned on operating fund balances and the interest portion of the Missouri American Water's debt repayment for a portion of the Meramec River Treatment Plant is shown on Line 6 of Table 10. Interest income is estimated based on a 1.0 percent annual interest rate applied to the average beginning and end of year fund balances. A slightly higher rate of 1.2 percent is assumed for funds held in the revenue bond reserve fund to reflect the ability to invest these funds for a longer term.

Total revenue available for wastewater utility operations is shown on Line 7 of Table 10. Total operation and maintenance expense for the wastewater system, previously projected on Line 23 of Table 8, is shown on Lines 8 and 9 of Table 10. Line 11 shows the estimated net revenue remaining after deducting total projected operation and maintenance expense (Line 10) from total wastewater revenue (Line 7). This net wastewater revenue is available or pledged for debt service coverage purposes.

Debt service requirements on existing and projected revenue bonds and SRF loans are presented on Lines 12 through 18. This debt financing program will provide a mechanism to spread the costs of major capital improvements over a portion of their useful lives and more equitably recover these costs from both current and future users of the improvements.

Line 19 of Table 10 shows other non-operating revenue of the wastewater utility, previously shown on Line 9 of Table 7. Line 20 of Table 10 shows the total amount of routine annual improvements which are completely financed by annual revenues. Funds used to finance a portion of the major capital improvement program are reported as a cost on Line 21 of Table 11 and as a source of revenue on Line 3 of Table 2. The net annual balance of annual revenues less expenditures is presented on Line 25. Lines 26 and 27 of Table 10 show the projected combined beginning and ending cash balances of the wastewater utility for each year of the study period exclusive of the targeted operating reserve balances. District staff provided information regarding the unencumbered balance of funds available at the beginning of fiscal year 2018.

## Wastewater Bill Comparison

Table 11 presents a comparison of typical wastewater service bills under approved rates for fiscal years 2016 through 2020 for various billable wastewater volumes and customer types. As indicated in the table, the monthly wastewater bill for the average metered residential customer contributing 7 Ccf of wastewater per month will increase by 10.6 percent in 2018 with additional increases of 10.8 percent in 2019 and 10.6 percent in 2020.

**Table 11. Typical Bill Comparison**

		Fiscal Year Ending June 30				
		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
		<i>Actual</i>	<i>Actual</i>	<i>Approved</i>	<i>Approved</i>	<i>Approved</i>
<b>Wastewater Bills</b>						
<u>Single Family Residential (Metered)</u>						
1.	1 Ccf per month	\$ 21.46	\$ 23.05	\$ 25.49	\$ 28.23	\$ 31.22
2.	5 Ccf per month	\$ 34.30	\$ 37.41	\$ 41.37	\$ 45.83	\$ 50.70
3.	7 Ccf per month	\$ 40.72	\$ 44.59	\$ 49.31	\$ 54.63	\$ 60.44
4.	10 Ccf per month	\$ 50.35	\$ 55.36	\$ 61.22	\$ 67.83	\$ 75.05
5.	15 Ccf per month	\$ 66.40	\$ 73.31	\$ 81.07	\$ 89.83	\$ 99.40
6.	20 Ccf per month	\$ 82.45	\$ 91.26	\$ 100.92	\$ 111.83	\$ 123.75
<u>Multi-Family Residential (Metered)</u>						
7.	20 Ccf per month	\$ 82.45	\$ 91.26	\$ 100.92	\$ 111.83	\$ 123.75
8.	40 Ccf per month	\$ 146.65	\$ 163.06	\$ 180.32	\$ 199.83	\$ 221.15
9.	60 Ccf per month	\$ 210.85	\$ 234.86	\$ 259.72	\$ 287.83	\$ 318.55
<u>Non-Residential (Normal Strength Wastewater)</u>						
10.	70 Ccf per month	\$ 245.10	\$ 273.62	\$ 302.37	\$ 334.88	\$ 370.39
11.	100 Ccf per month	\$ 341.40	\$ 381.32	\$ 421.47	\$ 466.88	\$ 516.49
12.	160 Ccf per month	\$ 534.00	\$ 596.72	\$ 659.67	\$ 730.88	\$ 808.69
<u>Non-Residential (Excess Strength Wastewater) (1)</u>						
13.	70 Ccf per month	\$ 404.07	\$ 465.30	\$ 499.64	\$ 538.43	\$ 579.43
14.	100 Ccf per month	\$ 522.48	\$ 595.90	\$ 642.26	\$ 694.64	\$ 750.34
15.	160 Ccf per month	\$ 737.18	\$ 834.20	\$ 903.98	\$ 982.86	\$ 1,067.35

(1) The 70, 100, and 160 Ccf bills assume excess strength of 150, 200, and 250 mg/l, respectively, of suspended solids and BOD.

Table 12 presents the results of a rate survey of the 50 largest U.S. cities based on published rates as of September 2016. St. Louis' rates have risen more quickly than some of the other large cities in this survey, resulting in above average residential charges while the commercial charges are still below average for the representative customers.

Table 12 - Survey of Typical Monthly Wastewater Bill - 50 Largest US Cities

Meter Size Gallons Ccf			Residential						Non-Residential			
			Small		Medium		Large		Commercial		Industrial	
			5/8"		5/8"		3/4"		1"		2"	
			3740		5984		11221		74805		7480500	
			5.0	Rank	8.0	Rank	15.0	Rank	100.0	Rank	10000.0	Rank
Population Rank			(\$)		(\$)		(\$)		(\$)		(\$)	
Albuquerque	32	NM	11.40	47	16.45	47	28.22	44	174.10	44	17,128.35	43
Arlington	50	TX	25.53	30	34.91	32	56.80	33	329.48	32	31,328.99	31
Atlanta	40	GA	63.09	2	108.11	1	217.94	1	1,551.59	1	156,882.56	1
Austin	14	TX	49.01	8	72.23	7	126.44	8	719.45	10	70,925.44	9
Baltimore	21	MD	50.23	6	70.38	8	130.70	6	738.05	7	67,406.61	10
Boston	22	MA	33.49	18	54.06	12	102.85	11	729.95	8	80,958.60	6
Charlotte	17	NC	34.07	16	47.60	19	79.17	19	473.78	19	45,164.05	18
Chicago	3	IL	14.52	44	23.23	43	43.56	38	290.40	36	29,040.00	34
Cleveland	45	OH	45.15	9	70.08	9	128.25	7	834.60	5	83,103.60	5
Colorado Spring	41	CO	27.35	27	34.70	33	51.85	35	298.75	35	26,929.75	35
Columbus	15	OH	35.26	15	47.74	17	76.99	21	434.08	22	44,825.90	19
Dallas	9	TX	24.90	31	36.97	28	66.92	27	321.39	33	31,222.19	33
Denver	26	CO	26.99	28	36.34	29	63.89	29	340.41	30	31,284.87	32
Detroit	18	MI	58.72	4	74.53	6	114.29	10	547.54	16	52,781.48	15
El Paso	19	TX	22.87	36	28.18	39	40.57	40	191.02	43	17,714.02	42
Fort Worth	16	TX	24.60	32	35.46	31	61.10	30	432.40	23	42,324.30	21
Fresno	34	CA	25.75	29	25.75	42	25.75	45	197.30	42	19,730.00	41
Houston	4	TX	33.08	21	57.53	11	114.58	9	722.63	9	71,600.42	8
Indianapolis	12	IN	44.49	11	59.94	10	95.98	12	581.33	14	33,755.10	27
Jacksonville	11	FL	33.96	17	45.88	21	78.48	20	530.88	17	47,969.60	17
Kansas City	37	MO	58.65	5	82.26	4	137.35	5	1,116.20	3	109,026.20	3
Las Vegas	30	NV	20.47	41	20.47	45	20.47	48	-		-	
Long Beach	36	CA	9.52	50	10.71	51	13.50	51	50.96	48	4,060.46	48
Los Angeles	2	CA	24.00	33	38.40	26	72.00	22	480.00	18	48,000.00	16
Louisville	27	KY	41.80	12	50.83	15	71.88	23	399.32	25	36,293.64	24
Memphis	20	TN	8.48	51	13.57	49	25.44	46	169.58	45	16,958.29	44
Mesa	38	AZ	23.62	35	26.94	41	42.23	39	219.07	41	20,066.33	40
Miami	44	FL	10.15	48	42.13	23	86.51	15	634.73	11	63,428.39	11
Milwaukee	28	WI	10.04	49	13.12	50	20.29	49	110.83	47	10,263.16	47
Minneapolis	48	MN	22.55	37	33.20	35	60.45	31	367.00	27	35,538.40	25
Nashville	25	TN	21.84	39	36.06	30	83.25	16	466.69	21	33,707.66	28
New York City	1	NY	30.95	22	49.52	16	92.85	13	619.00	13	61,900.00	13
Oakland	47	CA	11.53	46	14.95	48	24.31	47	119.73	46	11,395.83	46
Oklahoma City	31	OK	20.68	40	30.10	37	52.10	34	319.15	34	31,423.07	30
Omaha	42	NB	45.05	10	53.10	14	71.87	24	268.20	38	13,628.36	45
Philadelphia	5	PA	23.64	34	33.38	34	57.77	32	337.44	31	32,492.90	29
Phoenix	6	AZ	13.37	45	20.79	44	38.10	41	267.87	39	24,754.53	39
Portland	29	OR	49.10	7	78.56	5	147.30	4	1,001.87	4	97,002.17	4
Raleigh	43	NC	33.49	18	46.84	20	82.71	17	470.39	20	44,577.21	20
Sacramento	35	CA	19.85	43	19.85	46	19.85	50	-		-	
San Antonio	7	TX	20.24	42	27.79	40	45.41	37	259.37	40	25,179.54	37
San Diego	5	CA	33.16	20	43.95	22	69.14	25	392.05	26	37,687.33	23
San Fransisco	13	CA	62.00	3	99.20	3	186.00	3	766.40	6	76,640.00	7
San Jose	10	CA	37.91	14	37.91	27	37.91	42	631.00	12	63,100.00	12
Seattle	23	WA	64.65	1	103.44	2	193.95	2	1,293.00	2	129,300.00	2
Tucson	33	CZ	30.23	25	40.79	24	65.43	28	364.63	28	35,212.63	26
Tulsa	46	OK	28.23	26	40.15	25	67.95	26	353.78	29	24,778.65	38
Virginia Beach	39	VA	30.81	23	30.81	36	30.81	43	-		-	
Washington	24	KC	30.48	24	47.61	18	87.66	14	573.28	15	57,103.77	14
Wichita	49	KS	21.96	38	29.81	38	48.14	36	270.69	37	26,203.20	36
St. Louis		MO	41.37	13	53.28	13	81.07	18	421.47	24	39,724.47	22
Median			28.23		38.40		67.95		392.05		35,212.63	
Average			31.06		44.11		75.26		454.57		43,363.18	

(a) Las Vegas and Virginia Beach Commercial Rates are based on the type of business and number of fixtures. Each customer will have a different rate.

(b) Oklahoma City Rates are based on a meter multiplier. This must be combined with the base rate in order to bet an exact bill.

(c) Sacramento's commercial sewer rate is charged based on a factor associated with square footage, not consumption as in our analysis.

(d) Half Washington's combined Water and Sewer Metering Fee is included.

## Bond Covenant Compliance

### Rate Covenants

The majority of all District wastewater and stormwater revenues are deposited into and accounted for by separate wastewater and stormwater operating funds. Portions of these revenues are transferred to the General Fund, as required, to pay each utility's portion of operation and maintenance expense and routine capital expenditures.

Section 6.1 of the Master Bond Ordinance requires the District to operate the System on a revenue producing basis and at all times to prescribe, fix, maintain, and collect rates, fees, and other charges for the services, facilities, and commodities furnished by the System fully sufficient at all times to pay annual operation and maintenance expense, provide a reasonable operating reserve, produce net revenues in each fiscal year equal to at least 1.25 times the Debt Service Requirement on all Senior Bonds currently outstanding and 1.15 times the Debt Service Requirement on all Bonds then outstanding and accumulate sufficient funds to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the System to keep it in good working condition. In addition, Section 3.020(16) of the Charter requires the District to establish fair and reasonable schedules of charges and Section 7.130 of the Charter requires a balanced budget.

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*Capitalized terms  
are defined in the  
Bond Ordinance.*

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Based on a detailed analysis of the System's revenue and revenue requirements, as presented in the Wastewater System Financing section of this report, the District will continue to meet the rate covenant requirements after issuance of the Series 2017A Bonds. In addition, the existing wastewater rates in effect for fiscal year 2018 and the rates approved for fiscal years 2019 and 2020 are projected to provide sufficient user charge revenues, together with other available revenue sources, to meet all projected revenue requirements related to the proposed CIRP and remain in compliance with the rate covenants throughout the study period.

### Reasonable Charges

Section 6.7 of the Master Bond Ordinance requires that:

“None of the facilities or services afforded by the System will be furnished to any user without a reasonable charge being made therefor.”

Current and future rates for the System are based on detailed cost of service analyses to provide reasonable assurance that each customer class pays its proportionate share of the costs required to provide utility service. All users of the System are required to pay their proportionate share of operating and maintenance expenses in compliance with the Master

Bond Ordinance requirement and Federal user charge requirements. No free service is being provided by the District.

## **Adequate Maintenance**

Section 6.2 of the Bond Ordinance requires the District to operate the System in an efficient and economical manner and maintain the System at all times in good repair and sound operating condition. The System has historically been adequately maintained and found to be in good working order. Although costs are considered reasonable and result in rates comparable to similar sized utilities, the District is continuously looking at ways to reduce costs and keep utility rates as low as possible.

## **Additional Bonds Tests**

In order to issue additional revenue bonds on parity with prior Senior Bonds, the District must have sufficient revenues to meet either a preceding year or ensuing year additional bonds coverage test. Section 5.3 of the Master Bond Ordinance requires historical Net Operating Revenues and Investment Earnings (“net revenues”) for a period of 12 consecutive months of the most recent 18 consecutive months prior to the issuance of the proposed Senior Bonds to be at least equal to (i) 1.25 times the Maximum Annual Debt Service Requirement on all Senior Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds, and (ii) 1.15 times the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds.

For the ensuing year additional bonds test, the Master Bond Ordinance requires the forecasted net revenues for each fiscal year in the Forecast Period (the three consecutive fiscal years commencing with the fiscal year in which any proposed Senior Bonds are to be issued) to be at least (i) 1.25 times the Maximum Annual Debt Service Requirement on all Senior Bonds that will be Outstanding immediately after the issuance of the proposed Senior Bonds, and (ii) 1.15 times the Maximum Annual Debt Service Requirement on all Bonds which will be Outstanding immediately after the issuance of the proposed Senior Bonds.

Revenue adjustments are allowed for the preceding year test for any rate increase enacted prior to the delivery date of the proposed Senior Bonds and not fully reflected in the historical Net Operating Revenues actually received during the 12-month period. A similar adjustment is allowed for the ensuing year test if the rates were actually adopted by ordinance prior to issuance of the bonds. Without a future rate adjustment provision for the ensuing year test, the normal inflationary increases in operation and maintenance expenses could outpace the revenues obtained from a relatively stable customer base such that future net revenues and ensuing year debt service coverage may significantly decrease towards the end of the Forecast Period. This may require the District to enact multiple year rate increases prior to issuance of

the bonds, set rates at a current year debt service coverage level of 1.50 times the Debt Service Requirement or higher to account for the expected coverage deterioration, or only rely on the historic year test to issue additional Senior Bonds.

The Master Bond Ordinance also specifies additional bond tests for the issuance of any Subordinate Bonds. These tests are identical to the additional Senior Bond tests.

The District has never defaulted on any District-wide or subdistrict revenue bond payment and is expected to be able to issue additional revenue bonds throughout the study period. Table 13 presents the results of the rate covenant and additional bond coverage tests during the study period and projects revenue based on the Board-approved rate increases through 2020. As indicated by Line 4 of Table 13, the indicated annual rate covenant coverage ranges from 2.51 times annual debt service to 3.05 times annual senior lien debt service, exceeding the 1.25 minimum requirement. Likewise, the additional bond coverage levels for Senior Bonds, as shown on Lines 11 and 16 of Table 13, exceed their 1.25 minimum requirements throughout the study period. Coverage indicated for total debt is also above the 1.15 minimum requirement throughout the study period, as shown on Lines 12 and 17 of Table 14. Lines 19 and 20 present the ensuing year additional bonds test as calculated for the Series 2017A Bonds and does not consider the potential impact of future rate increases or bond issues. The District is in compliance with the ensuing year additional bonds test as the senior lien coverage exceed 1.25 times and total debt coverage exceed 1.15 times in each of the next three years.

Table 13. Debt Service Coverage under Projected Revenue Levels

		Fiscal Year Ending June 30				
		<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
		<i>Actual</i>	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<b>Rate Covenant Coverage</b>						
1.	Projected Net Revenue (1)	\$ 154,099,516	\$ 167,090,679	\$ 195,134,512	\$ 228,023,884	\$ 260,920,744
	Projected Debt Service to Bondholders (2)					
2.	Senior Lien Bonds	\$ 46,377,835	\$ 58,182,077	\$ 68,648,999	\$ 82,664,145	\$ 99,224,690
3.	Total Debt (3)	\$ 73,756,108	\$ 89,360,569	\$ 101,678,112	\$ 119,899,458	\$ 137,573,156
<b>Debt Service Coverage Levels</b>						
4.	Senior Lien Bonds (4)	3.32	2.87	2.84	2.76	2.63
5.	Total Debt (5)	2.09	1.87	1.92	1.90	1.90
<b>Additional Parity Test Coverage</b>						
	Projected Maximum Annual Debt Service (6)					
6.	Senior Lien Bonds	\$ 75,963,048	\$ 75,963,048	\$ 89,161,048	\$ 105,572,048	\$ 122,374,048
7.	Total Debt	102,593,481	102,593,481	115,747,731	133,846,080	152,337,330
<b>Preceding Year Test</b>						
8.	Net Revenue for Prior Fiscal Year	\$ 132,854,908	\$ 154,099,516	\$ 167,090,679	\$ 195,134,512	\$ 228,023,884
9.	Net Revenue Adjustment (7)	<u>15,942,589</u>	<u>16,257,499</u>	<u>17,544,521</u>	<u>20,489,124</u>	<u>24,170,532</u>
10.	Adjusted Net Revenue	\$ 148,797,497	\$ 170,357,015	\$ 184,635,201	\$ 215,623,635	\$ 252,194,416
<b>Preceding Year Debt Service Coverage Levels</b>						
11.	Senior Lien Bonds (8)	1.96	2.24	2.07	2.04	2.06
12.	Total Debt (9)	1.45	1.66	1.60	1.61	1.66
<b>Ensuing Year Test</b>						
13.	Net Revenue for Ensuing Fiscal Year	\$ 167,090,679	\$ 195,134,512	\$ 228,023,884	\$ 260,920,744	\$ 288,326,753
14.	Net Revenue Adjustment (10)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
15.	Adjusted Net Revenue	\$ 167,090,679	\$ 195,134,512	\$ 228,023,884	\$ 260,920,744	\$ 288,326,753
<b>Ensuing Year Debt Service Coverage Levels</b>						
16.	Senior Lien Bonds (11)	2.20	2.57	2.56	2.47	2.36
17.	Total Debt (12)	1.63	1.90	1.97	1.95	1.89
<b>Ensuing Year Additional Bonds Test - Current Issue</b>						
18.	Net Revenue for Ensuing Year (13)		\$ 200,477,546	\$ 237,930,218	\$ 274,915,583	
19.	Senior Lien Bonds (13)		2.64	3.13	3.62	
20.	Total Debt (13)		1.95	2.32	2.68	

(1) Net revenue as shown on Line 11 of Table 10. Includes the impact of approved rate increases each year.

(2) Projected actual payments to of principal and interest from the sinking fund to bondholders.

(3) Includes senior revenue bonds and subordinate debt obligations.

(4) Line 1 / Line 2. The Bond Ordinance requires net revenue to equal or exceed 1.25 times actual senior lien debt service.

(5) Line 1 / Line 3. The Bond Ordinance requires net revenue to equal or exceed 1.15 times actual total debt service.

(6) Maximum future debt service for all series of revenue bonds issued in previous years or during the current fiscal year.

(7) Adjustment for revenues increases to be fully operative July 1 of the current fiscal year as allowed by the Bond Ordinance.

(8) Line 10 / Line 6. The Bond Ordinance requires adjusted net revenue for the preceding fiscal year to equal or exceed 1.25 times the maximum annual debt service on all then outstanding senior lien obligations.

(9) Line 10 / Line 7. The Bond Ordinance requires adjusted net revenue for the preceding fiscal year to equal or exceed 1.15 times the maximum annual debt service on all then outstanding debt obligations.

(10) Adjustment for revenues increases not permitted for ensuing year coverage test unless already adopted by the Board.

(11) Line 15 / Line 6. The Bond Ordinance requires net revenue for the ensuing three fiscal years to equal or exceed 1.25 times the maximum annual debt service on all then outstanding senior lien revenue bonds.

(12) Line 15 / Line 7. The Bond Ordinance requires net revenue for the ensuing three fiscal years to equal or exceed 1.15 times the maximum annual debt service on all then outstanding bonds.

(13) The test for the currently proposed issue considers the next three fiscal years, with adjustments for future rate increases adopted by the Board. The coverage calculations all use the FY 2017 MADS amounts per the rate covenant.



## Principal Assumptions

In conducting our analyses and in forming an opinion of future operations summarized in this report, Raftelis has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodology utilized by Raftelis in performing the analysis follows generally accepted practices for such projections. Such assumptions and methodologies are summarized in this report and are reasonable and appropriate for the purpose for which they are used. While we believe the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by the conditions, events, and circumstances that actually occur. The principal assumptions used in the forecast of future operations are as follows:

1. In preparation of this report, Raftelis has relied on certain historical, financial, and statistical data supplied by District staff. While such data is considered reliable, Raftelis has not independently verified the detailed accuracy of such data.
2. The District's estimates of content, scheduling, and cost of the capital improvement program present a reasonable projection of the future construction program and complies with the initial terms of the Consent Decree.
3. Billed wastewater volume will continue to decrease but will level off towards the end of the study period.
4. Debt service for the revenue bonds proposed to be issued, including the Series 2017A Bonds, will be approximately as estimated as of the date of this report.
5. The District will maintain a minimum operating reserve balance at all times that is at least equal to 60 days of operating expenditures.
6. There will be no material changes in federal and state laws or regulations that would adversely impact the District's ability to secure tax-exempt financing for its System, place more stringent limitations on wastewater effluent discharges, materially increase the cost of constructing or operating the wastewater system, or otherwise adversely impact operations of the System.
7. The general economy that impacts System costs and users' capabilities to pay wastewater service charges will remain relatively stable at current conditions.

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## **APPENDIX E**

### **Form of Opinion of Co-Bond Counsel**

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## FORM OF OPINION OF CO-BOND COUNSEL

*Gilmore & Bell, P.C., St. Louis, Missouri, and White Coleman & Associates, LLC, St. Louis, Missouri, Co-Bond Counsel, propose to issue their approving opinions upon the issuance of the Series 2017A Bonds in substantially the following form:*

The Metropolitan St. Louis Sewer District  
St. Louis, Missouri

Barclays Capital Inc.,  
as representative of the Underwriters  
Chicago, Illinois

Re: \$316,175,000 The Metropolitan St. Louis Sewer District, Wastewater System  
Improvement and Refunding Revenue Bonds, Series 2017A

Ladies and Gentlemen:

We have acted as co-bond counsel in connection with the issuance by The Metropolitan St. Louis Sewer District (the “District”), of the above-captioned bonds (the “Bonds”). In this capacity, we have examined the District’s Charter, the law and the certified proceedings, certifications and other documents that we deem necessary to render this opinion.

The Bonds are issued pursuant to Master Bond Ordinance No. 11713 adopted by the Board of Trustees of the District on April 22, 2004, as supplemented by Ordinance No. 148335 adopted by the Board of Trustees of the District on December 5, 2017 (collectively, the “Bond Ordinance”). Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to such terms in the Bond Ordinance.

Regarding questions of fact material to our opinion, we have relied upon the certified proceedings and other certifications of public officials furnished to us without undertaking to verify the same by independent investigation.

Based on and subject to the foregoing, we are of the opinion, under existing law, as follows:

1. The Bonds have been duly authorized, executed and delivered by the District and are valid and legally binding limited obligations of the District, payable solely from the Pledged Revenues of the District’s sanitary sewer system, after providing for the costs of operation and maintenance thereof. The Bonds do not constitute general obligations of the District nor do they constitute an indebtedness of the District within the meaning of any constitutional, statutory or charter provision, limitation or restriction, and the taxing power of the District is not pledged to the payment of the Bonds.

2. The Bond Ordinance has been duly adopted by the Board of Trustees of the District and constitutes a valid and legally binding obligation of the District enforceable against the District. The Bond Ordinance creates a valid lien on the revenues and other funds pledged by the Bond Ordinance for the security of the Bonds on a parity with any Senior Bonds issued or to be issued as provided under the Bond Ordinance.

3. The interest on the Bonds (i) is excludable from gross income for federal income tax purposes, (ii) is exempt from income taxation by the State of Missouri, and (iii) is not an item of tax preference for purposes of computing the federal alternative minimum tax imposed on individuals and corporations, but is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on certain corporations. The opinions set forth in this paragraph are subject to the condition that the District complies with all requirements of the Internal Revenue Code of 1986, as amended (the "Code") that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, or continue to be, excludable from gross income for federal income tax purposes. The District has covenanted to comply with all of these requirements. Failure to comply with certain of these requirements may cause the interest on the Bonds to be included in gross income for federal and State of Missouri income tax purposes retroactive to the date of issuance of the Bonds. The Bonds have not been designated as "qualified tax-exempt obligations" for purposes of Section 265(b) of the Code.

We express no opinion regarding the accuracy, completeness or sufficiency of the Official Statement or other offering material relating to the Bonds (except to the extent, if any, stated in the Official Statement). Further, we express no opinion regarding the perfection or priority of the lien on revenues or other funds pledged under the Bond Ordinance or tax consequences arising with respect to the Bonds other than as expressly set forth in this opinion.

The rights of the owners of the Bonds and the enforceability of the Bonds and the Bond Ordinance may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights generally and by equitable principles, whether considered at law or in equity, and their enforcement may be subject to the exercise of judicial discretion in appropriate cases.

This opinion is given as of its date, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may come to our attention or any changes in law that may occur after the date of this opinion.

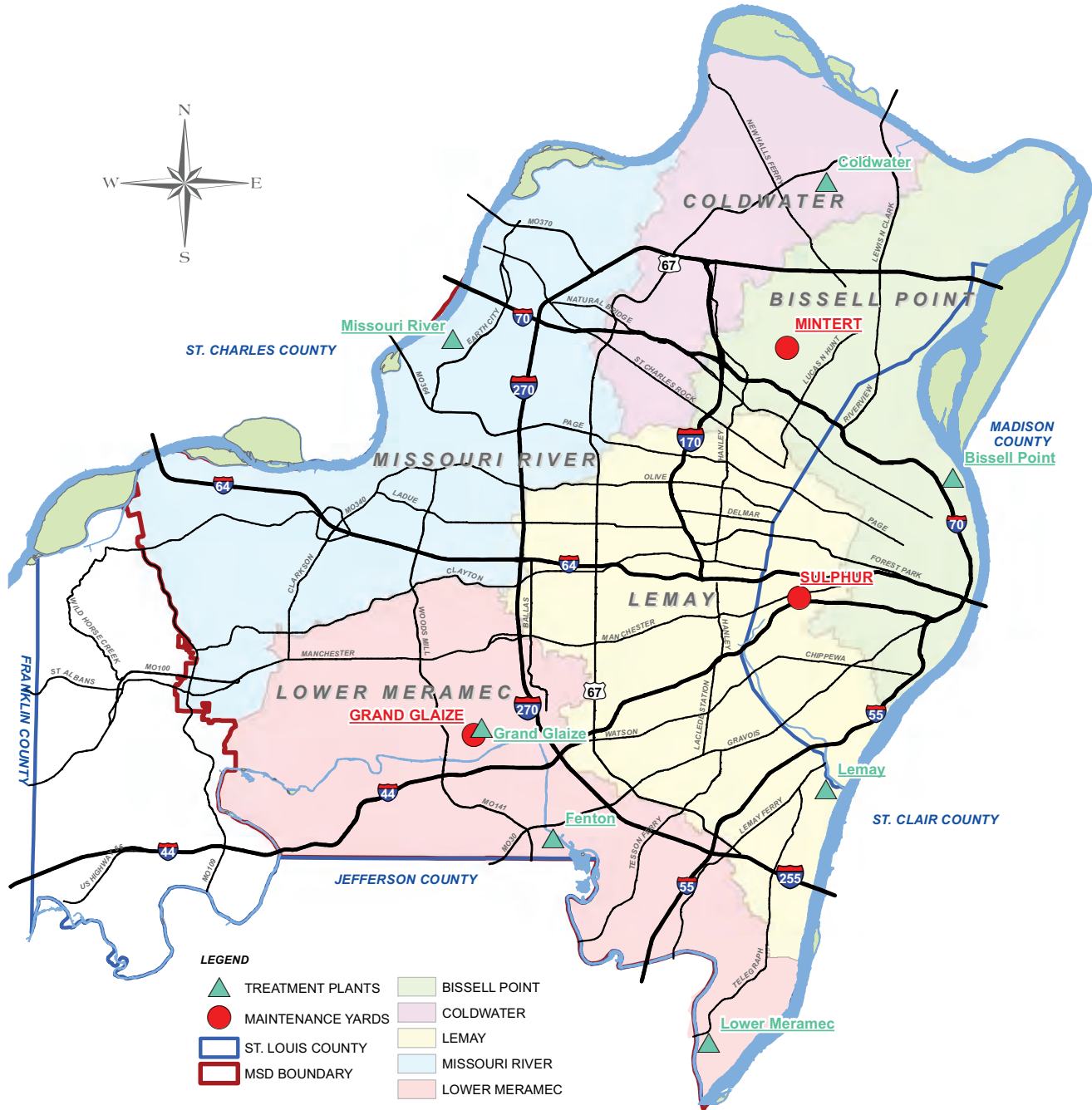
Very truly yours,





# The Metropolitan St. Louis Sewer District

## SERVICE AREAS



Miles of Pipe & Force Mains:  
(as of 06/30/2017)

Sanitary Sewers	= 4,700 Miles
Storm Sewers	= 3,000 Miles
Combined Sewers	= 1,700 Miles
Total	= 9,400 Miles



**Mixed Sources**  
Product group from well managed  
forests, controlled sources and  
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