

# COMPREHENSIVE ANNUAL FINANCIAL REPORT 2018

*For the Fiscal Years Ended April 30, 2018 and 2017*



A Department of the City of Kansas City, Missouri

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

*For the Fiscal Years Ended April 30, 2018 and 2017*

Prepared by  
Sean Hennessy, CFO  
Phillip Cridlebaugh, Finance & Accounting Manager  
Vickie Steinly, Performance Analytics Manager  
Finance & Accounting Staff



A Department of the City of Kansas City, Missouri



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Comprehensive Annual Financial Report**  
**Years Ended April 30, 2018 and 2017**

**Table of Contents**

**Introductory Section**

Letter of Transmittal.....	I
Certificate of Achievement for Excellence in Financial Reporting.....	II
Organizational Chart .....	III

**Financial Section**

Independent Auditor's Report .....	1
Management's Discussion and Analysis (Unaudited).....	4
Basic Financial Statements	
Statements of Net Position .....	17
Statements of Revenues, Expenses and Changes in Net Position .....	19
Statements of Cash Flows.....	21
Notes to Financial Statements .....	25
Required Supplementary Information (Unaudited)	
Schedule of the Department's Proportionate Share of the Net Pension Liability .....	69
Schedule of the Department's Contributions.....	70
Schedule of the Funding Progress .....	71
Supplementary Information	
Combining Schedule of Revenues, Expenses and Changes in Net Position – Sewer Fund .....	72

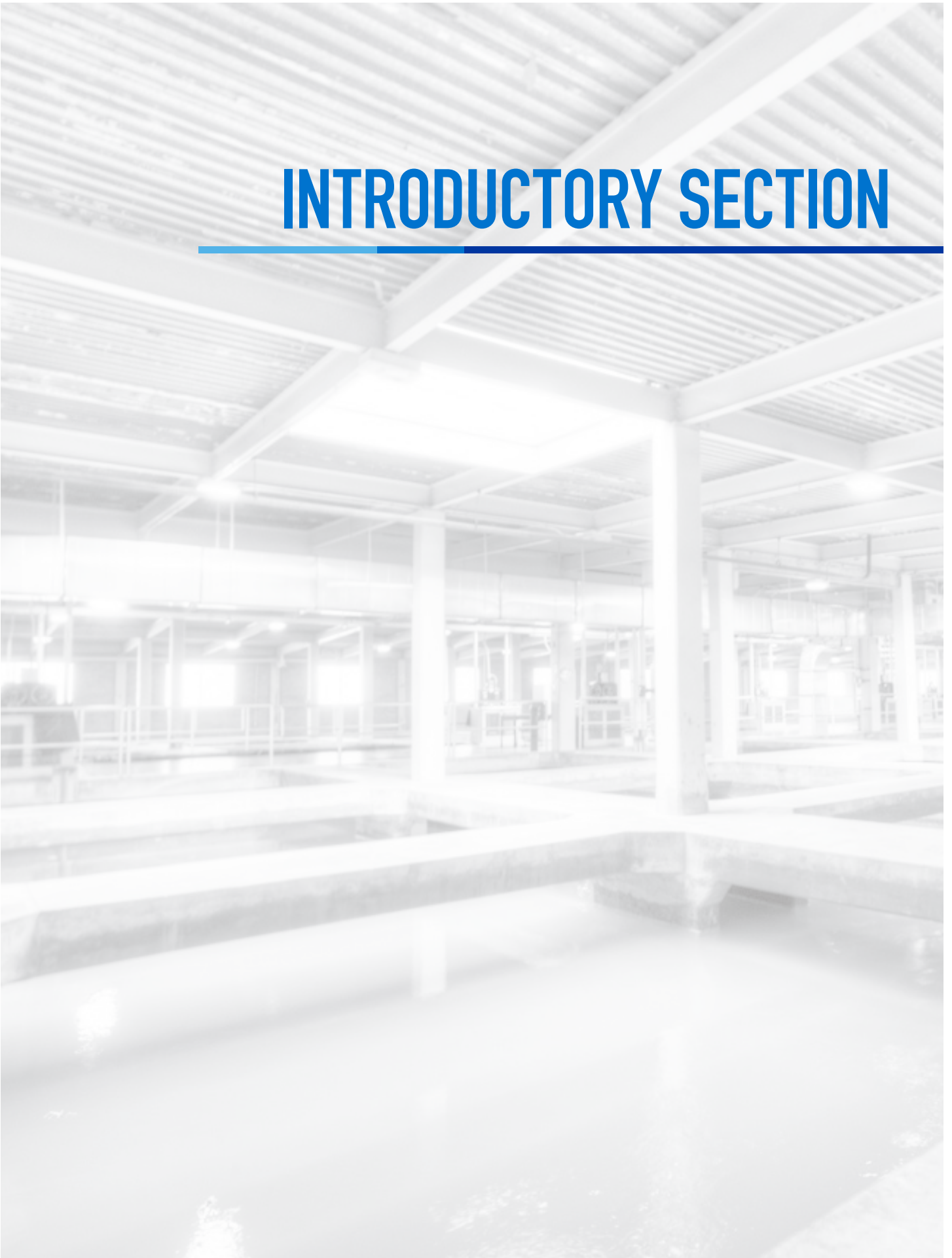
**Statistical Section**

Statistical Section Table of Contents.....	73
Financial Trends	
Net Position By Category.....	74

Changes in Net Position – Water Fund.....	75
Changes in Net Position – Sewer Fund .....	76
Revenue Capacity	
Residential Water Service Rates.....	77
Suburban Water Service Rates .....	78
Sewer and Stormwater Service Rates .....	79
Revenue Base and Revenues by Customer Class .....	80
Largest Users of the System – Water Fund .....	81
Largest Users of the System – Sewer Fund .....	82
Debt Capacity	
Revenue Bond Coverage Ratios .....	83
Schedule of Historical Revenue Bonds and Capital Leases – Water Fund .....	85
Schedule of Historical Revenue Bonds and Notes Payable – Sewer Fund.....	86
Ratios of Outstanding Debt .....	87
Demographic and Economic Information	
Demographic and Economic Statistics .....	88
Top 10 Principal Employers .....	89
Operating Information	
Operating Indicators .....	90
Schedule of Full-Time Equivalents Employees by Division – Water Fund.....	91
Schedule of Full-Time Equivalents Employees by Division –Sewer Fund.....	92
Schedule of Full-Time Equivalents Employees by Division – Stormwater Fund .....	93

# INTRODUCTORY SECTION

---





## KC WATER

### OFFICE OF THE DIRECTOR

4800 E. 63rd Street • Kansas City, MO 64130

P: 816-513-0504 • F: 816-513-0185 • [www.kcwaterservices.org](http://www.kcwaterservices.org)

October 30, 2018

The Honorable Mayor, Members of the City Council, City Manager, and Citizens of Kansas City:

City of Kansas City, Missouri Water Services Department (KC Water) is a department of Kansas City, Missouri's Municipal Government. It operates the Water, Wastewater and Stormwater Enterprise Funds, meaning it is financed by the fees collected from its customers. Kansas City municipal government has 19 departments and all of them, with the exception of KC Water and Aviation, are financed by taxes collected by the City. So, that makes KC Water a unique organization in many ways.

From a management perspective, KC Water is led by a Director who reports to the City Manager, just like the Directors of all other City departments. The two major utilities, Water and Wastewater, are each led by a utility officer. In addition, KC Water's utilities are regulated by Environmental Protection Agency (EPA) and Missouri Department of Natural Resources (MDNR) and the utilities follow standards as prescribed by the American Water Works Association (AWWA) and the Water Environment Federation (WEF).

As an entity that operates and manages three utilities (Water, Wastewater, and Stormwater), KC Water must fully recover the cost of managing each utility through its fee structure each fiscal year, essentially operating as a utility business. Each year, KC Water conducts a cost of service study with an outside third party engineering firm to determine the necessary revenue requirements and cost allocation methodology to cover the costs of operation. This cost of service study is the basis for the department's annual budget and follows guidelines as prescribed by the AWWA and the WEF. In addition, the Department manages a long term financial plan to forecast future revenue needs associated with major items such as debt service related to planned bond issues to cover capital mandates. This financial plan is a critical component into the annual cost of service study.

In terms of the annual budget approval process, the department initially submits its budget to the City Manager and Mayor six months prior to the start of the next fiscal year. After review by the City Manager and Mayor, public hearings on the budget are held around the city over the next few months. Two months before the next fiscal year starts, the budget and associated rate ordinances are presented to the four member Finance Committee of the City Council. Once the budget is passed out of the Finance Committee, it is presented by the Department to the full City Council who, in turn, is required to approve or not approve the proposed budget. So, from a governance structure, while the Department Director can recommend a budget and supporting rate structure to the City Manager, rates are ultimately required to receive final approval from the 13-member City Council, one month before the start of the next fiscal year.

KC Water is challenged by the fact that we have a low population density relative to other metropolitan utilities around the country. With 478,000 residents and 320 square miles of service territory, that includes 2,800 miles of water mains and 2,800 miles of sewer mains, our city must manage a network that is larger than the cities of San Francisco, Philadelphia, Boston and Miami (combined population of 3.4 million). With a smaller base and larger territory, average bills are higher than in many other cities.

As management of KC Water, we offer readers the attached Comprehensive Annual Financial Report (CAFR) for the fiscal year ended April 30, 2018. The CAFR is prepared in conformity with generally accepted governmental auditing standards, attested by a certified public accountant and is in accordance with local, state, and federal laws and requirements. The independent accounting firm of BKD, LLP, whose report is included, has audited the financial statements and related notes.

The report is designed to fairly present KC Water's financial position and results of operations as measured by the financial activity of the various funds. KC Water is responsible for both the accuracy of the data and the completeness and fairness of the presentations, based upon a comprehensive framework of internal controls that it has established for this purpose. Sufficient internal accounting controls exist to provide reasonable, rather than absolute, assurance regarding the safekeeping of assets and fair presentation of the financial statements, supporting schedules, and statistical tables. Management assumes full responsibility for the completeness and reliability of the information contained in this report. Management's Discussion and Analysis (MD&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview, and analysis of basic financial statements and should be read in conjunction with the basic financial statements.

KC Water is responsible for the operation and maintenance of the City's revenue-producing waterworks system ("System"), which includes facilities for obtaining, purifying and delivering potable water for domestic, commercial and industrial consumption and fire protection within the City and surrounding areas. The System is comprised of three separate and distinct units: The Water, Sewer and Stormwater utilities. Each is treated as a separate and distinct enterprise fund.

## **LOCAL ECONOMY**

Kansas City, Missouri is situated at the junction of the Missouri and Kansas rivers and sits opposite Kansas City, Kansas. It is the largest city in the Kansas City Metropolitan Area; the most populous city in Missouri, the sixth largest city in the Midwest, and the 37th most populous city in the United States. Kansas City's location makes it a national transportation hub. The most geo-central market in the nation, metro Kansas City is served by three interstate highways. Kansas City has a diversified economy including transportation, telecommunications, manufacturing, health care, legal services, trade, financial services, and governmental services. The region provides access to over one million jobs in over seven hundred occupations. The top three employers by industry within Kansas City are Services at 35%, which includes professional and business services, as well as education and health services; Trade, Transportation, and Utilities at 20%; and Government at 14%.

Housing in the City of Kansas City is comparatively affordable among major metropolitan cities, with values holding steady. The median price for existing homes is \$133,400, while the median home value in Missouri is \$138,400. Forbes named Kansas City third on its list of the “10 Best Cities to Buy a Home,” which followed up a prior survey naming the City as the thirteenth most affordable city in the United States for its low cost of living and housing affordability. U.S. News and World Report listed Kansas City as 49th on its “Best Places to Live” 2016 ranking and 19th on their “20 Best Affordable places to Live in the U.S.” ranking, showcasing the value of residing in Kansas City.

Kansas City is officially nicknamed the “City of Fountains - Heart of the Nation” with over 200 fountains, the second most in the world just behind Rome, Italy. Kansas City’s Parks and Recreation Department oversees 134 miles of trails and bike ways, 220 urban parks, 29 lakes, 103 playgrounds, 152 ball diamonds, 10 community centers, 105 tennis courts, five public golf courses, six museums and attractions, and 30 pools. Swope Park is one of the nation’s largest city parks, comprising 1,805 acres, and annually attracts more than two million visitors.

Kansas City is recognized for a growing number of hot spot attractions such as the Kauffman Center for the Performing Arts, the National World War I Museum, the Nelson-Atkins Museum of Art, the American Jazz Museum, the Negro Leagues Baseball Museum, and the College Basketball Experience.

In September, 2017 Thrillist put Kansas City on its new list of “9 Surprisingly Great US Food Cities You Have to Visit”. Kansas City made the list for barbeque, fine dining experiences and craft cuisines.

Kansas City was ranked 48th in U.S. News “Top 100 Best Places to Live” survey. To make the top of the list, a place had to have good value, be a desirable place to live, have a strong job market and a high quality of life. Kansas City, Missouri – the larger of two cities that bear the same name – is a major metropolitan area with a diverse population of more than two million people. Straddling two states and two rivers, Kansas City surprises newcomers who expect to find a homey metro area. Instead, they find a place that continues to celebrate its history while continuously innovating. Locals can sit down to a game of cards in a riverboat casino before enjoying a show at the Kansas City Symphony. Locals can honor resident legend Charlie Parker with a stop at the American Jazz Museum before sinking their teeth into some famous barbecue. As more millennials flock to Kansas City for its desirable cost of living and optimal job market, the area has fostered the growth of a creative community. Throughout the area, independent boutiques and coffee shops have sprung up, and building walls are decorated by colorful murals.

Per the Bureau of Labor Statistics, the average unemployment rate (not seasonally adjusted) for Kansas City as of April 30, 2018 was 3.6%, which is 0.3 percentage points lower than the national unemployment rate of 3.9%.



## **The Water Utility**

The primary system includes a 240 million gallon per day treatment plant, 4 major pump stations, 14 re-pump stations, numerous water storage facilities, and approximately 2,800 miles of water mains. Treated water service is provided to approximately 170,000 customers inside and outside the City and 32 active wholesale customers. There are also connections with the transmission systems of 6 other regional water suppliers that can be activated in case of an emergency.

The City obtains its raw water for the primary System from a combination of surface and ground water sources. Surface water comes from the Missouri River and accounts for approximately 80% of the raw water. Ground water comes from a well field in the Missouri River aquifer and accounts for the remaining 20% of raw water. Water treatment is a four-step process that consists of sedimentation, softening, stabilization and filtration. The treated water produced by KC Water meets current federal and state requirements for drinking water.

Water is pumped into the transmission system from storage reservoirs located at the water treatment plant, which is located on the north side of the Missouri River. The water transmission system is comprised of two essentially separate systems, one serving customers located north of the Missouri River and the other serving customers located south of the Missouri River. Water is delivered to the southern system through 2 tunnels under the Missouri River. The distribution systems include booster pumping stations and elevated, underground, and ground level water storage reservoirs. The existing treated water storage capacity is 155 million gallons. The average daily flow during Fiscal Year 2018 was about 94.4 million gallons per day with a peak day demand of 147.6 million gallons, which is about 62% of the primary treatment plant's design capacity.

The number of employees within the Water Utility totaled 475 at year end, April 30, 2018, which is an increase of 1% over the prior year. 61% labor class, 39% management class.

The table below provides a summary of System customers for the past 5 years.

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Retail Customers	150,958	151,073	152,251	153,232	154,220
Commercial / Industrial	16,954	17,865	17,843	17,862	18,028
Wholesale Customers	32	32	32	32	32
Total	167,944	168,970	170,126	171,126	172,280

The table below sets forth the 10 largest users of the System and the percentage of total consumption applicable to each for the Fiscal Year ended April 30, 2018:

User	Type of Business	Annual Consumption (100 cubic feet)	Percentage of Total Consumption
City of Lee's Summit	Wholesale Water	1,255,534	4.0%
Jackson County PWSD No. 1	Wholesale Water	1,118,992	3.6%
City of Belton	Wholesale Water	904,462	2.9%
City of Raymore	Wholesale Water	726,905	2.3%
Raytown Water Company	Wholesale Water	526,632	1.7%
City of Blue Springs	Wholesale Water	526,106	1.7%
Jackson County PWSD No. 2	Wholesale Water	518,291	1.7%
Dogwood Power Management	Utility	451,910	1.5%
KCP&L	Utility	442,137	1.4%
Ford Motor Company	Commercial	416,257	1.3%

### **The Sewer Utility**

The Sewer System serves an area of about 320 square miles. Wastewater collection and treatment services are provided to approximately 166,000 customers inside and outside the City on a retail basis and agreements with 27 surrounding communities and sewage districts on a contractual basis. KC Water maintains sanitary sewers and combined sewers, 40 wastewater pumping stations, 15 flood pumping stations, 3 effluent pumping stations and 6 wastewater treatment plants. The combined sewers transport both sanitary flows and, during rainfall events, stormwater flows. The combined sewers serve an area south of the Missouri River of about 56 square miles. All wastewater transported to the KC Water's treatment plants receives secondary treatment in compliance with federal and state environmental regulations.

A summary of the KC Water's wastewater treatment plants is presented in the table below.

### **Existing Wastewater Treatment Facilities**

Treatment Facility	Approximate First Year of Operation	Current Design Capacity (mgd)	Average Flow (mgd)
Blue River	1964/1985	105.00	60.10
Westside	1977	22.50	15.21
Birmingham	1977	20.00	10.35
Todd Creek	1999	3.40	1.91
Fishing River	2000	2.00	1.01
Rocky Branch	2005	2.80	1.76
TOTAL		155.70	90.34

The System's wastewater collection and treatment services include the processing of biosolids. Biosolids, the stabilized product generated from treatment of wastewater, is used in land application at a City-owned facility in the cultivation of non-food agriculture. The crops harvested, soy-beans and corn, are most generally used as sources of alternative energy, namely bio-diesel and ethanol. These activities meet the United States Environmental Protection Agency ("EPA") treatment and pollutant content criteria Part 503.13. Biosolids can be safely recycled and applied as fertilizer to improve the quality of land for agriculture, while increasing crop yields.

The number of employees within the Sewer Utility totaled 318 at year end, April 30, 2018. This is 1% more than the prior year. 66% labor class, 34% management class.

The table below sets forth the 10 largest users of the System and the percentage of total revenue applicable to each for the Fiscal year ended April 30, 2018:

User	Type of Business	Percentage of Total Revenue
Johnson County, KS	Inter-Jurisdictional	8.75%
Gladstone, MO	Inter-Jurisdictional	2.30%
North Kansas City, MO	Inter-Jurisdictional	2.03%
Ford Motor Company	Commercial	1.29%
Liberty, MO	Inter-Jurisdictional	1.03%
Cook Family Foods	Commercial	0.89%
Raytown, MO	Inter-Jurisdictional	0.73%
Hospital Corp of America	Commercial	0.55%
KC Parks & Rec	Governmental	0.49%
Children's Mercy Hospital	Commercial	0.46%

### **The Stormwater Utility**

Six hundred thirty miles of storm sewer carry stormwater from more than 53,000 stormwater inlets serving Kansas City. In addition, KC Water maintains a flood risk management system that includes 13.5 miles of levee and floodwall, operates 15 flood pump stations, and maintains six detention basins. On an annual basis, the Stormwater utility cleans 18,000 storm inlets, repairs and replaces 300 catch basins, and sweeps over 14,000 miles of stormwater gutters.

### **What is Stormwater?**

Stormwater is simply the water created by rainfall or melting snow. Stormwater is a necessary and important resource, but it can also cause water quality and water quantity issues in urban and suburban areas. When it does not soak into the ground, it runs off, traveling down street gutters and across paved surfaces, bare soil, or sloped lawns. As stormwater travels across paved surfaces, it collects pollutants such as sediment, fertilizers, pesticides, pet waste, oil, de-icing products, yard waste, and litter. It eventually makes its way to a ditch or storm drain in the street. From there, the storm drain system carries the water directly to local streams and rivers without treatment to remove pollutants.

Polluted stormwater can cause many problems, including threats to human and animal health, flooding, and erosion. Many pollutants are toxic, such as organic compounds, bacteria, and viruses. In addition, when too much stormwater runs off paved surfaces, roofs, and lawns, flooding may occur, which can cause damage to property. High volumes of stormwater flowing into a stream also can cause severe stream bank erosion.

### **Issues related to Stormwater**

Because stormwater runoff is the number one vehicle for pollutants entering our local waterways, it is critical that we be aware of what ends up on the ground and, ultimately, in our storm drains.

When rain soaks into the soil it is called infiltration. Infiltration helps clean and filter the water and recharge groundwater supplies. Paved, solid surfaces (also known as “impervious surfaces”) such as parking lots, roads, and driveways keep rain from soaking into the soil. In addition to preventing rain from soaking into the soil, impervious surfaces increase the speed and amount of water that rushes into streams, which in turn can cause erosion, damage properties, harm wildlife habitats, and fill streams with sediment.

In Kansas City, the average size home has a 1,000 square-foot roof. A rainfall of just one inch can cause over 600 gallons of water to run off that roof. Much of this water runs from gutters through downspouts onto impervious surfaces such as streets or driveways, carrying pollutants into storm drains and eventually into our rivers and streams.

In the past, cities installed pipes and storm drains to move stormwater away from homes and buildings as quickly as possible and drain it in the nearest creek or stream. This approach, still practiced in many places today, can result in polluted stormwater, stream bank erosion, and flooding in communities downstream. The new and preferred way to manage stormwater is to keep it onsite, slow it down, spread it out, and let it soak in. This allows the soil to filter out pollutants and enables water to enter streams gradually. Developers and municipalities are now using green infrastructure methods such as rain gardens, bio-retention, native plantings, and porous pavements to help manage stormwater where it falls.

### **Sewer Overflows**

Combined sewers are older systems that carry both stormwater and sewage (also called “wastewater”) to treatment plants. Kansas City has 58 square miles of combined sewers. When stormwater runoff from rain storms completely fills combined sewer pipes, the result is a “Combined Sewer Overflow,” a discharge of untreated wastewater and stormwater into local streams. In areas where sanitary sewers and storm sewers are separate, sewer overflows can occur when downspouts, sump pumps, and floor drains from homes and businesses are connected directly to the wastewater sewer.



The Stormwater Utility Division is responsible for stormwater management for the City of Kansas City, Missouri. Its responsibilities can be classified into quantity and quality management duties. Stormwater quantity management involves the management and coordination of improvements to the stormwater system and flood risk management systems including the levees, floodwalls, flood pump stations and the flood warning system. This entails coordinating the planning, design and construction of the improvements necessary to fulfill these responsibilities. Stormwater quality management involves the coordination, oversight and protection of the city's runoff and surface water quality through the implementation of the MS4 and Land Disturbance Permit requirements. The Stormwater division also sets the policies and standards (as well as implements existing standards) for stormwater infrastructure across the city.

In addition, the Stormwater Line Maintenance group is responsible for maintaining the rain gardens created within the city's right of ways. This responsibility will continue to increase in the future as more rain gardens are created. Other responsibilities now managed by the Stormwater utility include Leaf and Brush Removal and Household Hazardous Waste.

### **Stormwater Fees**

Most homeowners pay a stormwater fee that helps the community maintain its stormwater system. This fee is often collected monthly in a water or other city utility bill, or paid annually with property taxes. Stormwater fees vary across the Kansas City metropolitan region but are generally either a flat or tiered rate, which is based on the amount of impervious surface (such as roofs and driveways) on each property. If you are a resident of Kansas City, Missouri, your stormwater fee is included in your monthly water bill.

Currently, the average Kansas City, Missouri resident pays a stormwater monthly charge of approximately \$2.50 based on a fee of 50 cents per 500 square feet of impervious surface. This rate has remained unchanged since 2003. This fee supports several Stormwater Utility activities such as leaf and brush removal, street sweeping, household hazardous waste disposal, catch-basin cleaning, floodwall and levee inspections, and pipe and inlet maintenance. With such a minimal fee, there is only enough funding to minimally maintain the current stormwater system but not enough to replace or expand existing stormwater infrastructure.

Stormwater fees raise about \$13.4 million annually, vs. Stormwater Utility expenses of about \$21.6 million annually. The deficit is funded through reductions in cash reserves, which is not a sustainable long-term solution to funding the operating deficit.

### **Stormwater Credits**

In order to reduce stress on the stormwater system and encourage more green infrastructure to help reduce stormwater runoff, many communities give stormwater-fee credits to customers. KC Water is no exception, offering two types of stormwater fee credits for property owners that use best management practices on their property.

The first type of credit is a ratio credit for properties that have a large pervious area to help absorb stormwater and prevent it from entering storm drains. Property owners can receive a credit if the ratio of the total property area to the runoff surface area is at least 30:1. For example, if a property totals 30,000 square feet and paved or roofed areas make up only 1,000 square feet of the property, it qualifies for the credit. Properties that qualify are granted a 50% stormwater fee credit.

The second type of stormwater fee credit is a detention credit for the installation of stormwater detention structures on your property. These types of structures are installed and maintained to hold stormwater on the property during the heaviest parts of a storm, thereby reducing flooding and erosion downstream. Typically, detention basins are professionally designed stormwater management systems that are carefully built to ensure that they catch the required amount of water per rain storm for a given area.

The number of employees within the Stormwater Utility totaled 95 at year end, April 30, 2018. This is 2% more than the prior year. 63% labor class, 37% management class.

### **Capital Improvement Projects**

The Water Fund will have invested approximately \$424 million over five years in water capital improvement projects. The projects are dedicated to water distribution; replacement of water transmission mains; rehabilitation of water treatment plants, pump stations, and storage facilities. The largest allocation, or 74.0% of the total capital investment is committed to the water distribution system. The projects are designed to improve system performance and reliability, reduce water main breaks, enhance fire protection, and deliver safe drinking water to customers.

The Water Main Replacement (WMR) Program uses a strategic, data-driven approach to prioritize the replacement of the water distribution system. It is based on replacing approximately 1% of the system annually, approximately 28 miles/year. The capital investment is structured to reduce O&M costs through systematic replacement of aging infrastructure in order to increase system reliability and improve customer service through reduced service interruptions. The prioritization process is based on a business risk exposure assessment of each pipe segment in the system. The 2,800-mile distribution system was divided into more than 70,000 individual segments. Each segment was analyzed for a consequence-of-failure score and a likelihood-of-failure score to create a business risk exposure (BRE) score for each segment. Those segments with the highest BRE score are scheduled for replacement the following year. The model is a dynamic model updated with the latest information and run each year to establish the prioritization for the following year.

## **Overflow Control Program**

The Overflow Control Program (OCP) was developed to meet regulatory requirements set forth by the Environmental Protection Agency and the Missouri Department of Natural Resources. The regulations require minimizing overflows from the combined sewer system and preventing overflows from the separate sanitary sewer system. The parties have agreed to allow a 25-year period to meet those objectives by completing a planned list of improvements within five years. The implementation schedule is targeted to treat 88% of combined sewer flows and eliminate sanitary sewer overflows during a twenty-four hour rainfall event.

The Sewer Fund will have invested approximately \$600 million over five years in capital improvement projects. Of this amount, \$362 million is committed to the 25-year federally mandated OCP. The estimated total cost of OCP over the next 25 years is approximately \$4.5 billion, adjusted for inflation. In addition, annual expenditures for operations and maintenance are expected to increase by approximately \$72 million. It is anticipated that OCP will be financed primarily by the Sewer Fund.

## **Awards**

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to KC Water for its Comprehensive Annual Financial Report for the fiscal year ended April 30, 2017. This was the first year that KC Water submitted a CAFR for consideration for this award. To be awarded a Certificate of Achievement, a government must publish an easily readable and organized comprehensive annual financial report. The report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. This report is intended to meet the Certificate of Achievement Program's requirements and will be submitted to the GFOA to determine its eligibility for a certificate.

Respectfully submitted,



Sean Hennessy  
Chief Financial Officer



Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

**KC Water  
Missouri**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

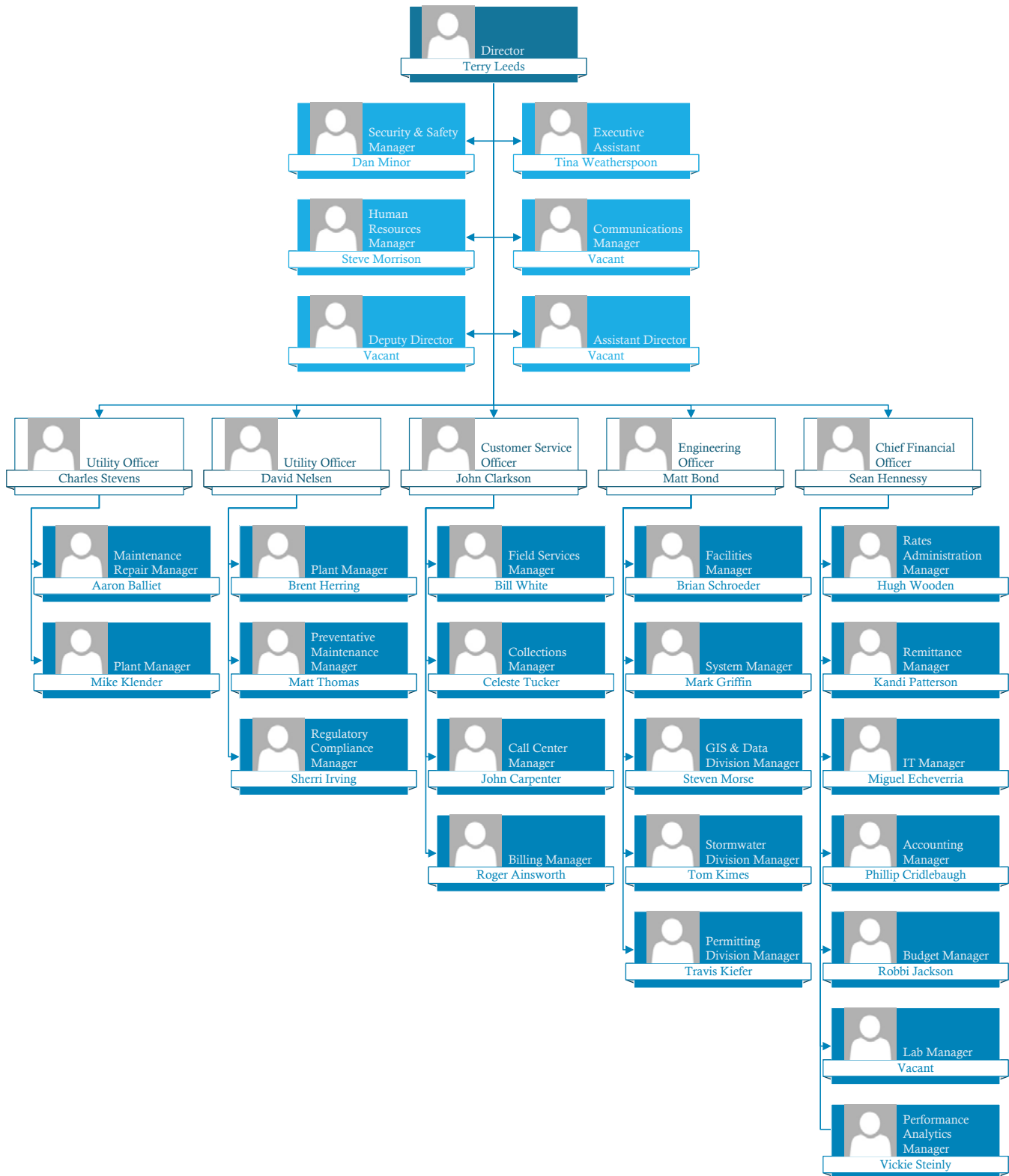
**April 30, 2017**

A handwritten signature in dark ink, reading "Christopher P. Morrill". The signature is written in a cursive, flowing style.

Executive Director/CEO



# KC Water Organization Chart





# FINANCIAL SECTION

---

*Basic Financial Statements*

*Required Supplementary Information (Unaudited)*

*Supplementary Information*

## Independent Auditor's Report

The Honorable Mayor and  
Members of the City Council  
KC Water, a department of the  
City of Kansas City, Missouri  
Kansas City, Missouri

We have audited the accompanying financial statements of each major fund of the Water Services Department of the City of Kansas City, Missouri (KC Water), a department of the City of Kansas City, Missouri, as of and for the years ended April 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise KC Water's basic financial statements, as listed in the table of contents.

### *Management's Responsibility for the Financial Statements*

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

### *Auditor's Responsibility*

Our responsibility is to express opinions 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the 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 opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of each major fund of KC Water as of April 30, 2018 and 2017, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As discussed in Note 1, the financial statements present only KC Water and do not purport to, and do not, present fairly the financial position of the City of Kansas City, Missouri as of April 30, 2018 and 2017, and the changes in its financial position, or, where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, pension information and other postemployment benefits listed in the table of contents be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### ***Other Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise KC Water's basic financial statements. The Introductory Section, Statistical Section, and combining schedule of revenues, expenses and changes in net position – Sewer Fund listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.



The Honorable Mayor and  
Members of the City Council  
Page 3

The combining schedule of revenues, expenses and changes in net position – Sewer Fund is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining schedule of revenues, expenses and changes in net position – Sewer Fund is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Introductory Section and the Statistical Section 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 it.

*BKD, LLP*

Kansas City, Missouri  
October 30, 2018

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Management's Discussion and Analysis**  
**Years Ended April 30, 2018 and 2017**

Management's discussion and analysis (MD&A) of KC Water, a department of the City of Kansas City, Missouri (comprised of three separate and distinct enterprise funds: Water, and the combined Sewer and Storm Fund) provides readers a narrative overview and analysis of each Fund's financial statements and activities for the fiscal years ended April 30, 2018 and 2017, with selected comparative information for the fiscal year ended April 30, 2016.

Readers are encouraged to consider the information presented here in conjunction with the financial statements and notes in order to provide a complete understanding of the financial performance and activities during the years ended April 30, 2018 and 2017.

***Overview of the Financial Statements***

The accompanying financial statements are prepared on an accrual basis of accounting in accordance with U.S. generally accepted accounting principles as set forth by the Governmental Accounting Standards Board (GASB). Revenues and expenses are recognized when earned and incurred, not when received or paid. Capital assets include land, buildings, improvements, equipment and infrastructure assets, such as water mains, pumping stations and treatment plants. Capital assets, except land, are depreciated over their estimated useful lives. Major outlays for capital improvements are capitalized as projects during construction. Capital assets not completed by year-end have been reported as construction-in-progress. (See Notes to Financial Statements for significant accounting policies).

The statements of net position present information about each fund's assets, deferred outflows of resources, liabilities and deferred inflows of resources, with the difference between the sum of assets and deferred outflows of resources and the sum of liabilities and deferred inflows of resources reported as net position.

The statements of revenues, expenses and changes in net position present information showing how each fund's net position changed during the year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows.

The statements of cash flows relate to the flows of cash and cash equivalents. Consequently, only transactions that affect each fund's cash accounts through operating activities, noncapital financing activities, capital and related financing activities and investing activities are presented in the statements.

## Financial Position and Assessment

### Summary of Net Position - KC Water

(In thousands)

	April 30,		
	2018	2017	2016
<b>Assets</b>			
Current assets - unrestricted	\$ 126,163	\$ 104,141	\$ 105,862
Current assets - restricted	118,535	68,807	152,786
Noncurrent investments - unrestricted	317,414	292,648	220,425
Noncurrent investments - restricted	285,580	248,607	180,106
Capital assets	2,241,096	2,106,631	1,969,420
Other assets	13,177	6,296	6,939
Total assets	3,101,965	2,827,130	2,635,538
<b>Deferred Outflows of Resources</b>			
Loss on refunding	3,106	3,675	4,281
Pension plan	23,710	31,927	5,683
Total deferred outflows of resources	26,816	35,602	9,964
Total assets and deferred outflows of resources	\$ 3,128,781	\$ 2,862,732	\$ 2,645,502
<b>Liabilities</b>			
Current liabilities	\$ 57,745	\$ 45,535	\$ 37,247
Liabilities payable from restricted assets	68,881	60,452	57,706
Long-term liabilities	1,069,067	936,081	855,320
Total liabilities	1,195,693	1,042,068	950,273
<b>Deferred Inflows of Resources - Pension Plan</b>	967	1,124	2,989
<b>Net Position</b>			
Net investment in capital assets	1,502,642	1,425,852	1,354,131
Restricted-expendable	95,726	93,666	92,627
Unrestricted	333,753	300,022	245,482
Total net position	1,932,121	1,819,540	1,692,240
Total liabilities, deferred inflows of resources and net position	\$ 3,128,781	\$ 2,862,732	\$ 2,645,502

### The Water Fund

Within the Water Fund, total assets increased by \$34.8 million or 2.7% from the previous year. Restricted cash and investments decreased by \$32.9 million or 21.3%. Unrestricted cash and investments used in daily operations increased by 2.5%. However, notes receivable decreased by 12.2%. The decrease is attributable to the \$508,778 of scheduled payments received from entities under intergovernmental construction cost agreements and \$89,088 of early payoff. Capital assets increased by \$46.8 million or 4.9% as anticipated by the ongoing capital improvement program. Total liabilities decreased by \$18.4 million or 3.5%.

At the close of FY2018, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in a net position of \$823.4 million; of this amount, \$137.1 million is considered unrestricted. The unrestricted net position may be used to meet ongoing business activities of the Water Fund and may not be used to fund the City's governmental activities. Total net position increased by \$48.2 million or 6.2% over the previous year, indicating that the Water Fund improved its financial position. The largest portion of net position, \$647.5 million or 78.6%, consists of investment in capital assets (e.g., land, buildings, water treatment facility, water utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to the customers of the water collection, processing and distribution systems.

In FY2017, total assets of the Water Fund increased by \$123.0 million or 10.6% from the previous year. Restricted cash and investments increased by \$43.2 million or 38.9% due to a sale of bonds in February 2017 for future construction use. Unrestricted cash assets used in daily operations increased by 29.5%. Capital assets increased by \$47.6 million or 5.3% as anticipated from the ongoing capital improvements program.

Total liabilities of the Water Fund increased by \$87.3 million or 20.1%. The majority of the increase in liabilities was due to the sale of bonds for \$78.1 million. The rest of the increase in liabilities, \$17.3 million, was due to the increase in the net pension liability.

At the close of FY2017, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$775.2 million; of this amount, \$122.7 million is considered unrestricted. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$50.3 million or 6.9% over the previous year, indicating that the Fund improved its financial position. The largest portion of net position, \$614.2 million or 79.2%, consists of investment in capital assets (e.g., land, buildings, water treatment facilities, water utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the water collection, processing and distribution systems.

### ***Sewer and Storm Funds Combined***

Within the Sewer Fund, total assets increased by \$240.0 million or 15.5% from the prior year. During FY2018, there were \$165 million of new Sewer Revenue Bonds issued. Cash, cash equivalents and investments that are restricted for debt service costs, construction and renewal and replacement increased by \$118.6 million or 73.1%. Unrestricted cash and investments used in daily operations increased by 13.8%. Capital assets increased by \$87.6 million or 7.6% as anticipated from the ongoing capital improvements program.

Total liabilities increased by \$172.0 million or 33.1%. Postemployment benefits (pension and OPEB) decreased by \$1.1 million or 3.4%.

At the close of the year, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$1,108.7 million for the Sewer Fund. Of this amount, \$196.7 million is unrestricted net position. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$64.4 million or 6.2% from the previous year indicating that the Fund improved its financial position. The largest portion of net position, \$855.2 million or 77.1%, consists of net investment in capital assets (e.g., land, buildings, wastewater treatment facilities, sewer and stormwater utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the wastewater and stormwater systems.

In FY2017, total assets of the Sewer Fund increased by \$68.6 million or 4.7% from the prior year. During the year, there were no new Sewer Revenue Bonds issued. Cash provided by operating activities were higher. Cash, cash equivalents and investments that are restricted for debt service costs, construction and renewal and replacement decreased by approximately 26.6%. Unrestricted assets used in daily operations increased by approximately 19.9%. Most of the increase was attributable to the 2.0% rise in net accounts receivable resulting from the 13.0% scheduled increase in sewer service fees. Capital assets increased by \$89.6 million or 8.4% as anticipated from the ongoing capital improvements program.

Total liabilities increased by \$4.5 million or less than 1.0%. Contract retainage payable increased by \$2.3 million or 97.2% as the result of increased construction activity. Claims liability increased by \$1.58 million or 27.3% and postemployment benefits (pension and OPEB) increased by \$14.7 million or 92.5%.

At the close of FY2017, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$1,044.3 million for the Sewer Fund. Of this amount, \$177.3 million is unrestricted net position. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$77.0 million or 8.0% from the previous year indicating that the Fund improved its financial position. The largest portion of net position, \$811.6 million or 77.7%, consists of net investment in capital assets (*e.g.*, land, buildings, wastewater treatment facilities, sewer and stormwater utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the wastewater and stormwater systems.

# Summary of Revenues, Expenses and Changes in Net Position - KC Water

(In thousands)

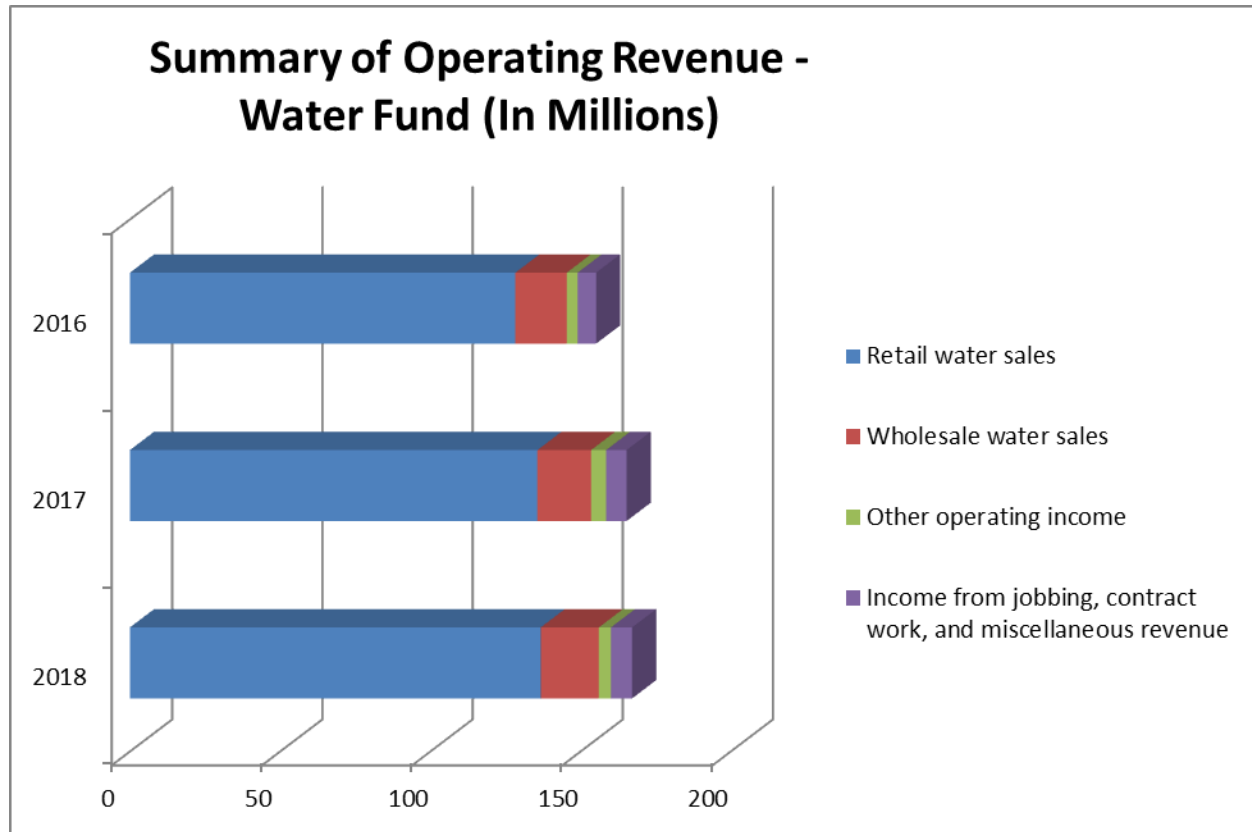
	Year Ended April 30		
	2018	2017	2016
Operating revenues	\$ 392,674	\$ 375,255	\$ 348,817
Operating expenses	<u>(268,782)</u>	<u>(237,887)</u>	<u>(216,717)</u>
Operating income	123,892	137,368	132,100
Nonoperating expenses, net	<u>(22,529)</u>	<u>(18,121)</u>	<u>(16,923)</u>
Increase in net position before capital contributions and transfers	101,363	119,247	115,177
Payment-in-lieu of taxes	(4,396)	(2,960)	-
Capital contributions	<u>15,614</u>	<u>11,013</u>	<u>9,904</u>
Change in net position	112,581	127,300	125,081
Net position, beginning of year	<u>1,819,540</u>	<u>1,692,240</u>	<u>1,567,159</u>
Total net position - end of the year	<u>\$ 1,932,121</u>	<u>\$ 1,819,540</u>	<u>\$ 1,692,240</u>

	Year Ended April 30		
	2018	2017	2016
Residential and commercial sales	\$ 341,597	\$ 324,597	\$ 296,959
Intermunicipal sewer charges	33,518	33,688	37,243
Other operating revenue	10,475	10,110	8,432
Income from jobbing, contract work and miscellaneous revenue	<u>7,084</u>	<u>6,860</u>	<u>6,183</u>
Total operating revenues	<u>\$ 392,674</u>	<u>\$ 375,255</u>	<u>\$ 348,817</u>
Operating revenues - water	\$ 167,214	\$ 165,357	\$ 155,209
Operating revenues - sewer	<u>225,460</u>	<u>209,898</u>	<u>193,608</u>
Total operating revenues	<u>\$ 392,674</u>	<u>\$ 375,255</u>	<u>\$ 348,817</u>



## The Water Fund

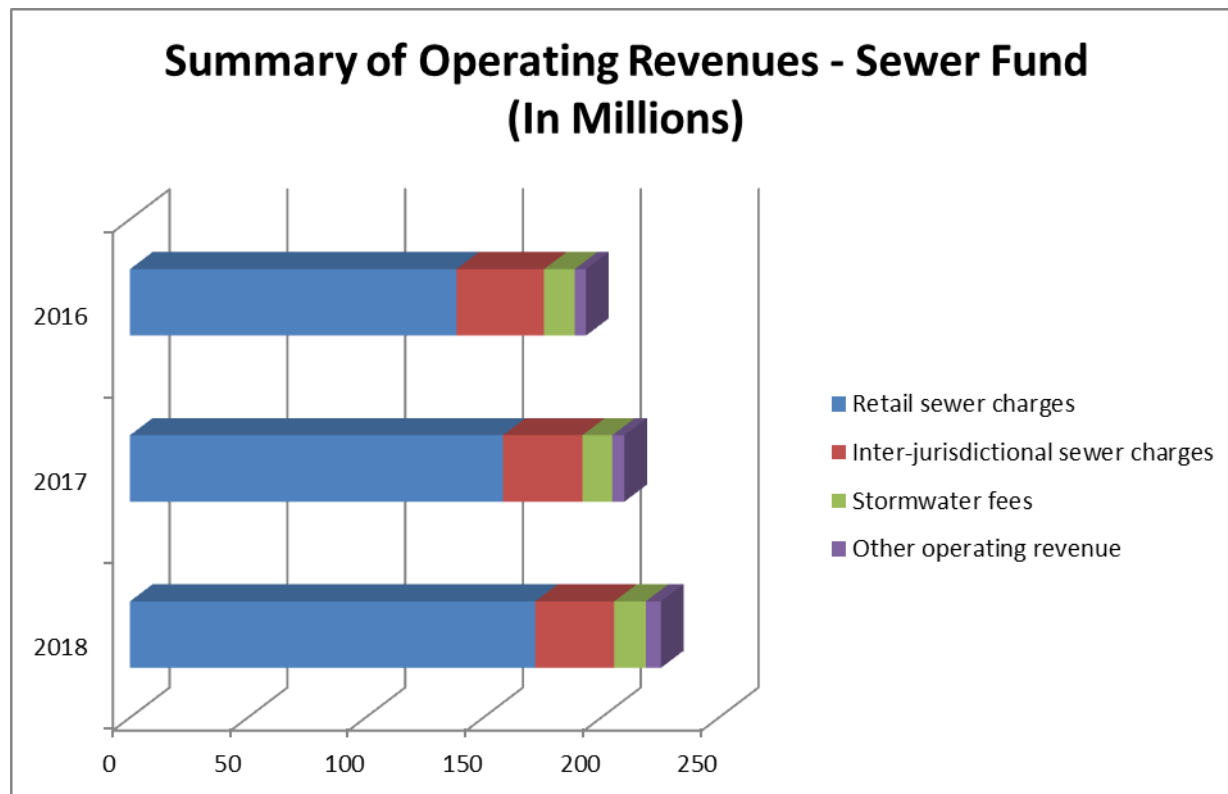
Within the Water Fund, in FY2018, total operating revenues increased by \$1.9 million or 1.1%. The scheduled 1% rate increase contributed additional revenue while water consumption decreased. Overall water consumption by customers decreased by 1.04 million CCF (hundred cubic feet) or 2.5%. Income from jobbing, contract work and miscellaneous revenue increased by \$0.2 million or 3.3%, including reimbursable revenue from prorating the cost of Consumer Services to the Sewer Fund.



At the close of FY2017, the Water Fund total operating revenues increased by \$10.2 million or 6.5%. The scheduled 3% rate increase contributed additional revenue, and water consumption increased. Water consumption by retail residential and commercial customers increased by 1.28 million CCF or 5.6%. Consumption by wholesale or governmental customers increased by 0.26 million CCF or 3.6%, with the resulting increase in sales of \$8.1 million or 5.1%. Income from jobbing, contract work and miscellaneous revenue increased by \$0.7 million, including reimbursable revenue from prorating the cost of Consumer Services to the Sewer Fund.

### **Sewer and Storm Funds Combined**

Within the Sewer Fund, total operating revenues increased by \$15.6 million or 7.4% in FY2018. Residential and commercial retail sewer charges contributed \$14.4 million to the increase, primarily due to the scheduled 9% sewer rate increase in effect all year. Revenue from inter-jurisdictional services decreased \$0.2 million, which lowered the overall operating revenue increase by 1.1%. Sales to inter-jurisdictional customers decreased by 0.5% over the prior year due primarily to slightly lower metered flows. Stormwater fees increased \$0.7 million or 5.4% during the year. There was a 26.4% increase in other operating revenue that consists primarily of forfeitures and penalties, and rentals of equipment, miscellaneous facilities and parking lots.



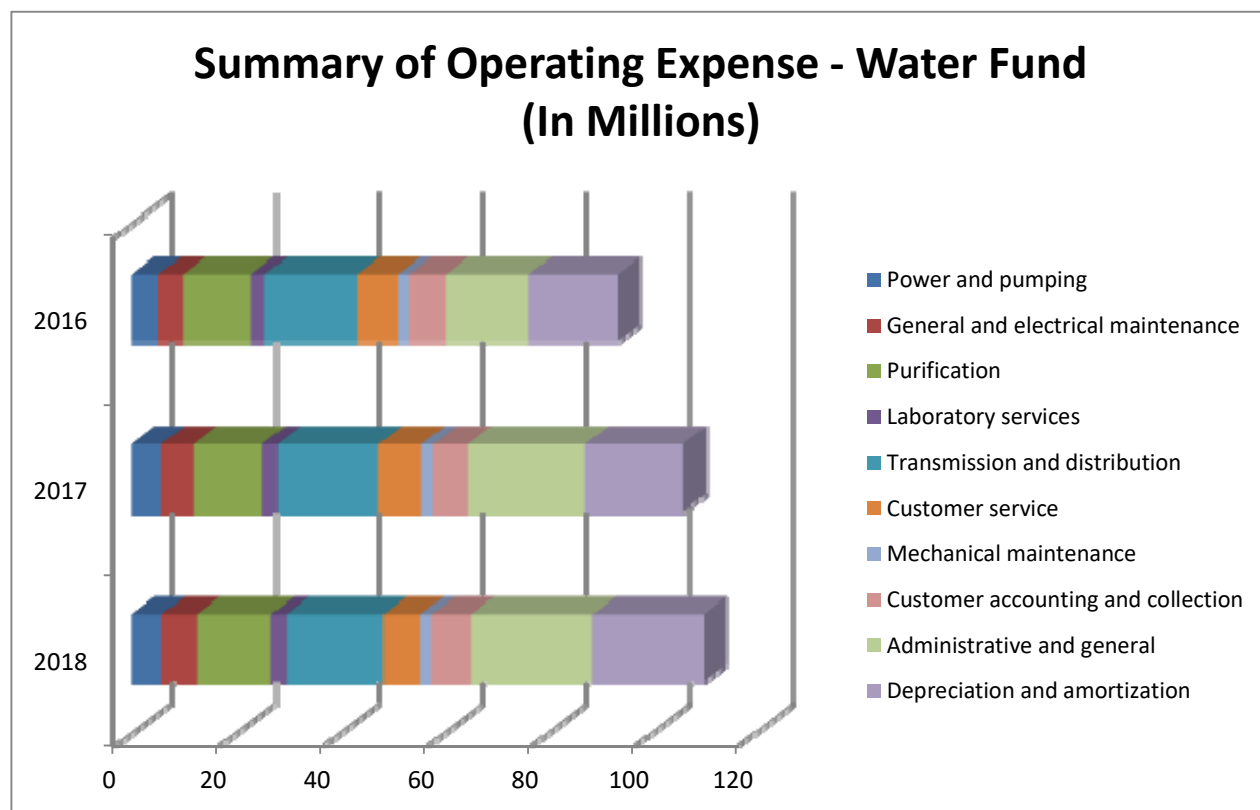
At the close of FY2017, the Sewer Fund total operating revenues increased by \$16.3 million or 8.4%. The increase was attributable mostly to the scheduled 13% sewer rate increase in effect all year. Additional sales, net of bad debt expense, to residential and commercial retail customers contributed \$19.8 million to operating revenues, while inter-jurisdictional charges decreased by \$3.6 million. Other operating revenue consists primarily of forfeitures and penalties, and rentals of equipment, miscellaneous facilities and parking lots. Other operating revenue increased by approximately \$0.3 million or 6.7%.

**Summary of Operating Expenses - KC Water**  
*(In thousands)*

	<b>Year Ended April 30</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
Power and pumping	\$ 5,954	\$ 5,901	\$ 5,288
General and electrical maintenance	6,827	6,152	4,676
Purification	14,156	13,186	13,081
Laboratory services	2,915	2,907	2,642
Transmission and distribution	18,678	19,437	17,819
Customer service	7,087	8,263	7,769
Mechanical maintenance	2,206	2,306	2,152
Customer accounting and collection	7,597	6,659	6,984
Sewage treatment and pumping	35,706	29,346	30,674
Sewer maintenance	36,806	30,900	30,082
Industrial and household hazardous waste control	1,471	1,409	1,339
Administrative and general	74,367	62,393	48,429
Depreciation and amortization	55,012	49,028	45,782
<b>Total operating expenses</b>	<b>\$ 268,782</b>	<b>\$ 237,887</b>	<b>\$ 216,717</b>
Operating expenses - water	\$ 110,237	\$ 106,344	\$ 93,722
Operating expense - sewer	158,545	131,543	122,995
<b>Total operating expenses</b>	<b>\$ 268,782</b>	<b>\$ 237,887</b>	<b>\$ 216,717</b>

## The Water Fund

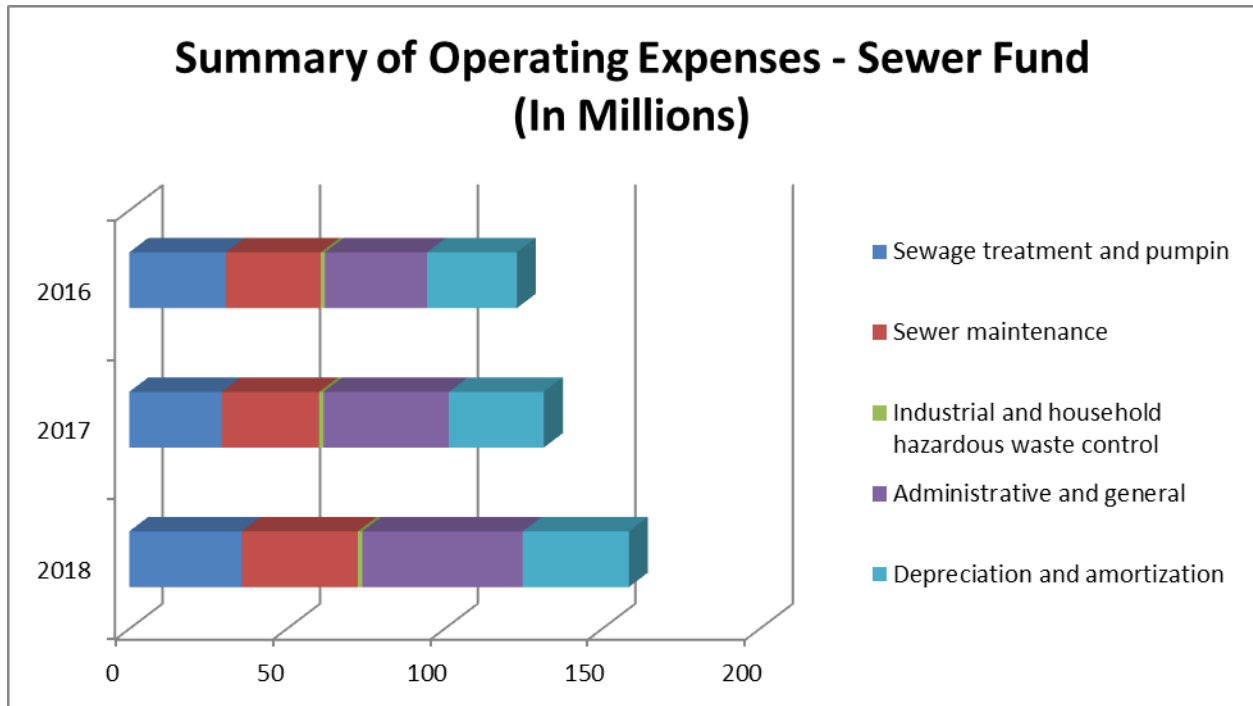
Total operating expenses of the Water Fund increased by \$3.9 million or 3.7% over the previous year. General and electrical maintenance expenses rose by \$0.7 million or 11.0%. This was due to an increase in repairs and maintenance of equipment costs. Transmission and distribution expense decreased by \$0.8 million or 3.9%. This was due to using less supplemental work forces for pipeline repair in FY2018. Administrative and general expenses increased by \$0.8 million or 3.6%. Depreciation and amortization increased by \$2.5 million or 13.0% as anticipated by the ongoing capital improvement plan.



In FY2017, total operating expenses of the Water Fund increased by \$12.6 million or 13.5% over the previous year. Power and pumping increased by \$0.6 million or 11.6% mostly because of an increase of electricity rates used to pump water. General and electrical maintenance expenses rose by \$1.5 million or 31.6%. This was due to an increase in repairs and maintenance of equipment costs. Transmission and distribution expense increased by \$1.6 million or 9.1%. This was due to using additional supplemental work forces for pipeline repair. Administrative and general expenses increased by \$6.5 million or 40.7%. This was due to an increase in the general liability insurance expense due to an increase in lawsuits. Depreciation and amortization increased by \$1.7 million or 9.7% as anticipated by the ongoing capital improvement plan.

## Sewer and Storm Funds Combined

Total operating expenses of the Sewer Fund increased by \$27.0 million or 20.5% over the previous year. The Fund continues investing in sewer system improvements in order to comply with the Overflow Control Program (OCP) as mandated by the Environmental Protection Agency (EPA). Sewage treatment and pumping expenses increased by \$6.4 million or 21.7%, sewer maintenance expenses increased by \$5.9 million or 19.1%, administrative and general expenses increased by \$11.2 million or 28.1% and depreciation and amortization expenses increased by \$3.5 million or 11.7%.



In FY2017, total operating expenses of the Sewer Fund increased by \$8.5 million or 7.0% over the previous year. The Fund continues investing in sewer system improvements in order to comply with the Overflow Control Program (OCP) as mandated by the Environmental Protection Agency (EPA). Sewage treatment and pumping expenses decreased by \$1.3 million or 4.3%, sewer maintenance expenses increased slightly, administrative and general expenses increased by \$7.4 million or 22.9% and depreciation and amortization expenses increased by \$1.6 million or 5.5%.

## **Capital Assets**

### Water Fund

Capital assets in the Water Fund totaled \$996.2 million (net of accumulated depreciation) and accounted for 75.9% of total assets at April 30, 2018. Construction activities are ongoing to replace older and undersized water mains throughout the City, upgrade and improve water treatment plant operations, and modernize infrastructure. During the year, projects totaling \$82.7 million were completed. They included \$69.6 million of constructed water mains and appurtenances and \$3.1 million for treatment plant and equipment upgrades. In addition to completed projects, there was \$4.8 million in assets contributed from property developers. Additions and replacements of motorized vehicles and equipment totaled \$2.9 million. The increases in depreciable capital assets were offset by disposals and retirements of \$10.4 million.

At year end 2017 capital assets totaled \$949.3 million (net of accumulated depreciation) and accounted for 74% of total assets at April 30, 2017. Construction activities are ongoing to replace older and undersized water mains throughout the City, upgrade and improve water treatment plant operations, and modernize infrastructure. During the year, projects totaling \$99.0 million were completed. They included \$63.5 million of constructed water mains and appurtenances and \$10.5 million for treatment plant and equipment upgrades. In addition to completed projects, there was \$2.3 million in assets contributed from property developers. Additions and replacements of machinery and equipment totaled \$4.7 million. The increases in depreciable capital assets were offset by disposals and retirements of \$12.6 million.

### Sewer Fund

At April 30, 2018, capital assets of the Sewer Fund totaled \$1,244.9 million (net of accumulated depreciation) and accounted for 69.6% of total assets. Construction activities are ongoing to repair and improve the City's wastewater system and comply with the Federal Consent Decree to reduce pollutants discharged into streams and waterways. See additional discussion of the Overflow Control Program (OCP) in the next section. During the year, projects totaling \$185.9 million were completed. The investment in infrastructure included \$104.9 million for sanitary sewer rehabilitation and replacement; \$13.0 million for storm sewer and waterways improvements; and \$8.4 million for pumping stations and equipment. In addition to completed projects, there was \$10.8 million in contributed assets from property developers and assets transferred from Public Works. The increases in depreciable capital assets were offset by disposals and retirements of \$27.6 million.

At April 30, 2017, capital assets totaled \$1,157.3 million (net of accumulated depreciation) and accounted for 74.7% of total assets. Construction activities are ongoing to repair and improve the City's wastewater system and comply with the Federal Consent Decree to reduce pollutants discharged into streams and waterways. See additional discussion of the Overflow Control Program (OCP) in the next section. During the year, projects totaling \$85.6 million were completed. The investment in infrastructure included \$59.0 million for sanitary sewer rehabilitation and replacement; \$7.3 million for storm sewer and waterways improvements; and \$21.1 million for pumping stations and equipment. In addition to completed projects, there was \$7.5 million in contributed assets from property developers and \$2.7 million of assets transferred from Public Works. The increases in depreciable capital assets were offset by disposals and retirements of \$11.2 million.

Additional information on the Department's capital assets can be found in *Note 5: Capital Assets*.

## ***Debt Administration***

Debt Administration provides long-term debt planning, issuance and administration in accordance with the approved Capital Improvement Program to meet the City's capital infrastructure needs. The City promotes effective communication with bond rating agencies in order to maintain its high credit rating and manages debt in accordance with established debt policies. Water revenue bond proceeds are used to finance improvements to the water collection, processing and distribution systems. Wastewater revenue bond proceeds are used to finance improvements to the stormwater management and control systems, and wastewater collection and processing systems. The Fund's outstanding debt is aligned in such a manner to meet the most stringent debt service requirements. In addition, water system net revenues secure outstanding bonds of the Water Fund and wastewater system net revenues secure outstanding bonds of the Sewer Fund.

Moody's Investors Service maintains an Aa2 rating on the City's senior lien water revenue debt and the senior and junior sanitary sewer revenue bonds. Water revenue bond proceeds have been used to fund critical water main replacements and extensions, water treatment plant and pump station improvements and enhancements to service reliability for customers. Sanitary sewer bond proceeds will fund treatment plant, pumping station and sewer conveyance system improvements.

Moody's rating affirmation reflects the:

- Large service area that covers the majority of the Kansas City, Missouri, metropolitan area
- Stable regional economy
- Debt service coverage levels that have improved following consecutive rate increases
- Adequate net working capital
- Favorable debt profile with future borrowing expected
- Satisfactory legal covenants for bondholders

Credit Rating Agencies	Water and Wastewater Bonds Credit Rating
Moody's	Aa2
Standard & Poor's	Water - AA+, Wastewater - AA

Standard & Poor's Ratings Services has maintained an AA+ rating on the City's existing water revenue secured debt and AA rating on the City's existing wastewater secured debt. The rating reflects their assessment of the water and sewer systems:

- Large service base that serves much of the Kansas City metropolitan area (MSA)
- Rates are affordable, given the combined water and sewer rates are above 4% of the City's median household effective buying income
- Strong financial performance

In April 2014, the City received citizens' approval of an additional \$500 million in water revenue bonds, of which \$362.1 million remains for the purpose of extending and improving the water system.

In August 2012, citizens voted to authorize \$500 million in additional sewer revenue bonds. Following the Series 2018A bond issue, the City will have approximately \$159.7 million remaining from its original bond authorization.



The Water and Sewer Funds have the right under the respective bond ordinances to issue additional bonds payable from the same sources and secured by the same revenues, but only in accordance with and subject to the terms and conditions set forth in the respective bond ordinances. The Funds are both required to meet an earnings test before issuing any additional bonds on parity with existing debt.

Additional information about the Department's long-term debt can be found in *Note 6: Long-Term Obligations and Restricted Assets*.

### ***Request for Information***

This financial report is designed to provide the Department's management, investors, creditors and customers with a general view of the Department's finances and to demonstrate the Department's accountability for the funds it receives and expends. For additional information about this report or if you need additional financial information, please contact:

Sean Hennessy  
Chief Financial Officer  
KC Water  
4800 East 63rd Street  
Kansas City, Missouri 64130



# FINANCIAL SECTION

---

*Basic Financial Statements*

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Net Position**  
**April 30, 2018**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Assets</b>			
Current assets			
Cash and cash equivalents	\$ 4,297,595	\$ 6,499,609	\$ 10,797,204
Investments	16,160,547	24,480,237	40,640,784
Accounts receivable, net	24,339,811	38,646,565	62,986,376
Accrued interest receivable	292,043	218,413	510,456
Current portion of notes receivable	526,276	-	526,276
Inventories	2,319,374	723,187	3,042,561
Due from other City funds	7,650,679	8,302	7,658,981
	<u>55,586,325</u>	<u>70,576,313</u>	<u>126,162,638</u>
Total unrestricted current assets			
Restricted assets			
Cash and cash equivalents	14,206,586	10,896,830	25,103,416
Investments	6,531,290	85,048,457	91,579,747
Accrued interest receivable	650,398	1,201,013	1,851,411
	<u>21,388,274</u>	<u>97,146,300</u>	<u>118,534,574</u>
Total restricted current assets			
Total current assets	<u>76,974,599</u>	<u>167,722,613</u>	<u>244,697,212</u>
Investments	126,217,735	191,196,502	317,414,237
Restricted assets - investments	100,680,438	184,899,659	285,580,097
Notes receivable	3,760,119	-	3,760,119
Due from other City funds	7,620,827	-	7,620,827
Prepaid bond insurance, net of accumulated amortization	1,796,401	-	1,796,401
Capital assets, depreciable, net	967,539,676	1,184,610,980	2,152,150,656
Capital assets, nondepreciable	28,653,480	60,291,809	88,945,289
	<u>1,313,243,275</u>	<u>1,788,721,563</u>	<u>3,101,964,838</u>
Total assets			
<b>Deferred Outflows of Resources</b>			
Loss on refunding	1,969,672	1,136,750	3,106,422
Items related to pension plan	12,619,821	11,089,740	23,709,561
	<u>14,589,493</u>	<u>12,226,490</u>	<u>26,815,983</u>
Total deferred outflows of resources			
	<u>\$ 1,327,832,768</u>	<u>\$ 1,800,948,053</u>	<u>\$ 3,128,780,821</u>

See Notes to Financial Statements

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Liabilities, Deferred Inflows of Resources and Net Position</b>			
Current liabilities			
Accounts payable	\$ 10,899,790	\$ 34,255,114	\$ 45,154,904
Current portion of compensated absences	873,522	726,119	1,599,641
Accrued payroll and related expenses	1,662,152	1,538,787	3,200,939
Contracts and retainage payable	361,988	734,358	1,096,346
Other liabilities	319,126	-	319,126
Current portion of due to other City funds	392,259	29,852	422,111
Current portion of claims liability	4,189,080	1,762,357	5,951,437
	<u>18,697,917</u>	<u>39,046,587</u>	<u>57,744,504</u>
Total current liabilities, less liabilities payable from restricted assets			
Liabilities payable from restricted assets			
Accrued interest and fiscal agent fees	6,935,528	7,201,254	14,136,782
Current portion of revenue bonds and notes payable	19,625,000	25,236,300	44,861,300
Contracts and retainage payable	2,214,345	4,614,852	6,829,197
Customer deposits	3,053,522	-	3,053,522
	<u>31,828,395</u>	<u>37,052,406</u>	<u>68,880,801</u>
Total liabilities payable from restricted assets			
Total current liabilities	<u>50,526,312</u>	<u>76,098,993</u>	<u>126,625,305</u>
Claims liability	14,411,633	5,962,977	20,374,610
Compensated absences	2,749,028	2,070,230	4,819,258
Net pension liability	29,029,374	24,792,427	53,821,801
Other postemployment benefit obligation	5,463,202	4,616,767	10,079,969
Revenue bonds and notes payable, net of current portion	<u>401,742,928</u>	<u>578,228,912</u>	<u>979,971,840</u>
Total liabilities	<u>503,922,477</u>	<u>691,770,306</u>	<u>1,195,692,783</u>
<b>Deferred Inflows of Resources - Pension Plan</b>	<u>521,618</u>	<u>445,486</u>	<u>967,104</u>
<b>Net Position</b>			
Net investment in capital assets	647,464,407	855,177,897	1,502,642,304
Restricted			
Capital projects	23,714,871	35,129,621	58,844,492
Debt service	15,118,951	21,762,305	36,881,256
Unrestricted	<u>137,090,444</u>	<u>196,662,438</u>	<u>333,752,882</u>
Total net position	<u>823,388,673</u>	<u>1,108,732,261</u>	<u>1,932,120,934</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 1,327,832,768</u>	<u>\$ 1,800,948,053</u>	<u>\$ 3,128,780,821</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Net Position**  
**April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Assets</b>			
Current assets			
Cash and cash equivalents	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Investments	12,578,071	17,156,604	29,734,675
Accounts receivable, net	20,492,504	32,210,995	52,703,499
Accrued interest receivable	346,343	494,428	840,771
Current portion of notes receivable	508,778	-	508,778
Inventories	3,306,707	845,716	4,152,423
Due from other City funds	253,929	7,254	261,183
Total unrestricted current assets	<u>44,238,913</u>	<u>59,901,717</u>	<u>104,140,630</u>
Restricted assets			
Cash and cash equivalents	8,263,340	7,703,553	15,966,893
Investments	31,018,467	21,038,276	52,056,743
Accrued interest receivable	373,423	410,172	783,595
Total restricted current assets	<u>39,655,230</u>	<u>29,152,001</u>	<u>68,807,231</u>
Total current assets	<u>83,894,143</u>	<u>89,053,718</u>	<u>172,947,861</u>
Investments	123,832,470	168,816,009	292,648,479
Restricted assets - investments	115,074,250	133,533,055	248,607,305
Notes receivable	4,375,483	-	4,375,483
Prepaid bond insurance, net of accumulated amortization	1,919,583	-	1,919,583
Capital assets, depreciable, net	906,955,007	1,033,382,823	1,940,337,830
Capital assets, nondepreciable	42,393,545	123,899,918	166,293,463
Total assets	<u>1,278,444,481</u>	<u>1,548,685,523</u>	<u>2,827,130,004</u>
<b>Deferred Outflows of Resources</b>			
Loss on refunding	2,390,817	1,284,265	3,675,082
Items related to pension plan	17,314,711	14,611,847	31,926,558
Total deferred outflows of resources	<u>19,705,528</u>	<u>15,896,112</u>	<u>35,601,640</u>
 Total assets and deferred outflows of resources	 <u>\$ 1,298,150,009</u>	 <u>\$ 1,564,581,635</u>	 <u>\$ 2,862,731,644</u>

See Notes to Financial Statements

<b>Liabilities, Deferred Inflows of Resources and Net Position</b>	<b>Water (restated)</b>	<b>Sewer (restated)</b>	<b>Total (restated)</b>
Current liabilities			
Accounts payable	\$ 9,725,360	\$ 23,280,576	\$ 33,005,936
Current portion of compensated absences	833,384	731,196	1,564,580
Accrued payroll and related expenses	1,535,185	1,262,052	2,797,237
Contracts and retainage payable	437,373	708,047	1,145,420
Other liabilities	319,126	-	319,126
Current portion of due to other City funds	389,681	253,885	643,566
Current portion of claims liability	4,158,719	1,900,183	6,058,902
Total current liabilities, less liabilities payable from restricted assets	17,398,828	28,135,939	45,534,767
Liabilities payable from restricted assets			
Accrued interest and fiscal agent fees	6,576,120	5,719,527	12,295,647
Current portion of revenue bonds and notes payable	19,610,000	19,961,818	39,571,818
Contracts and retainage payable	2,114,050	3,985,092	6,099,142
Customer deposits	2,485,195	-	2,485,195
Total liabilities payable from restricted assets	30,785,365	29,666,437	60,451,802
Total current liabilities	48,184,193	57,802,376	105,986,569
Claims liability	12,504,927	5,448,602	17,953,529
Compensated absences	2,721,618	2,118,543	4,840,161
Net pension liability	30,723,968	25,927,891	56,651,859
Other postemployment benefit obligation	5,437,790	4,592,153	10,029,943
Revenue bonds and notes payable, net of current portion	422,761,618	423,843,789	846,605,407
Total liabilities	522,334,114	519,733,354	1,042,067,468
<b>Deferred Inflows of Resources - Pension Plan</b>	609,750	514,569	1,124,319
<b>Net Position</b>			
Net investment in capital assets	614,223,737	811,627,922	1,425,851,659
Restricted			
Capital projects	23,797,302	41,025,858	64,823,160
Debt service	14,463,454	14,380,009	28,843,463
Unrestricted	122,721,652	177,299,923	300,021,575
Total net position	775,206,145	1,044,333,712	1,819,539,857
Total liabilities, deferred inflows of resources and net position	\$ 1,298,150,009	\$ 1,564,581,635	\$ 2,862,731,644

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Revenues, Expenses and Changes in Net Position**  
**Year Ended April 30, 2018**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 156,118,392	\$ 185,478,250	\$ 341,596,642
Intermunicipal sewer charges	-	33,517,836	33,517,836
Other operating revenue	4,011,261	6,463,802	10,475,063
Income from jobbing, contract work and miscellaneous revenues	7,084,210	-	7,084,210
	<u>167,213,863</u>	<u>225,459,888</u>	<u>392,673,751</u>
Total operating revenues			
<b>Operating Expenses</b>			
Power and pumping	5,953,828	-	5,953,828
General and electrical maintenance	6,827,393	-	6,827,393
Purification	14,156,235	-	14,156,235
Laboratory services	2,914,501	-	2,914,501
Transmission and distribution	18,678,483	-	18,678,483
Customer service	7,087,348	-	7,087,348
Mechanical maintenance	2,205,877	-	2,205,877
Customer accounting and collection	7,597,356	-	7,597,356
Sewage treatment and pumping	-	35,705,684	35,705,684
Sewer maintenance	-	36,805,512	36,805,512
Industrial and household hazardous waste control	-	1,470,939	1,470,939
Administrative and general	23,460,691	50,906,139	74,366,830
Depreciation and amortization	21,354,867	33,656,813	55,011,680
	<u>110,236,579</u>	<u>158,545,087</u>	<u>268,781,666</u>
Total operating expenses			
<b>Operating Income</b>	<u>56,977,284</u>	<u>66,914,801</u>	<u>123,892,085</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	1,265,617	1,455,586	2,721,203
Interest expense and fiscal agent fees	(12,984,672)	(12,347,984)	(25,332,656)
Other	53,426	29,550	82,976
	<u>(11,665,629)</u>	<u>(10,862,848)</u>	<u>(22,528,477)</u>
Total nonoperating expenses, net			
<b>Excess of Revenues Over Expenses Before Capital Contributions and Transfers</b>	45,311,655	56,051,953	101,363,608
<b>Capital Contributions</b>	4,764,615	10,849,031	15,613,646
<b>Payment-in-Lieu of Taxes</b>	<u>(1,893,742)</u>	<u>(2,502,435)</u>	<u>(4,396,177)</u>
<b>Increase in Net Position</b>	48,182,528	64,398,549	112,581,077
<b>Net Position, Beginning of Year</b>	<u>775,206,145</u>	<u>1,044,333,712</u>	<u>1,819,539,857</u>
<b>Net Position, End of Year</b>	<u><u>\$ 823,388,673</u></u>	<u><u>\$ 1,108,732,261</u></u>	<u><u>\$ 1,932,120,934</u></u>



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Revenues, Expenses and Changes in Net Position**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 153,502,388	\$ 171,095,023	\$ 324,597,411
Intermunicipal sewer charges	-	33,687,701	33,687,701
Other operating revenue	4,995,566	5,114,883	10,110,449
Income from jobbing, contract work and miscellaneous revenues	6,859,793	-	6,859,793
Total operating revenues	<u>165,357,747</u>	<u>209,897,607</u>	<u>375,255,354</u>
<b>Operating Expenses</b>			
Power and pumping	5,900,861	-	5,900,861
General and electrical maintenance	6,151,741	-	6,151,741
Purification	13,185,929	-	13,185,929
Laboratory services	2,906,656	-	2,906,656
Transmission and distribution	19,436,953	-	19,436,953
Customer service	8,263,111	-	8,263,111
Mechanical maintenance	2,305,651	-	2,305,651
Customer accounting and collection	6,658,713	-	6,658,713
Sewage treatment and pumping	-	29,345,704	29,345,704
Sewer maintenance	-	30,899,733	30,899,733
Industrial and household hazardous waste control	-	1,409,208	1,409,208
Administrative and general	22,639,576	39,753,428	62,393,004
Depreciation and amortization	18,893,810	30,134,434	49,028,244
Total operating expenses	<u>106,343,001</u>	<u>131,542,507</u>	<u>237,885,508</u>
<b>Operating Income</b>	<u>59,014,746</u>	<u>78,355,100</u>	<u>137,369,846</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	1,238,646	2,166,678	3,405,324
Interest expense and fiscal agent fees	(12,005,062)	(9,459,096)	(21,464,158)
Other	(3,961)	(59,551)	(63,512)
Total nonoperating expenses, net	<u>(10,770,377)</u>	<u>(7,351,969)</u>	<u>(18,122,346)</u>
<b>Excess of Revenues Over Expenses Before Capital Contributions and Transfers</b>	48,244,369	71,003,131	119,247,500
<b>Capital Contributions</b>	<u>3,465,581</u>	<u>7,547,696</u>	<u>11,013,277</u>
<b>Payment-in-Lieu of Taxes</b>	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
<b>Increase in Net Position</b>	50,337,534	76,962,009	127,299,543
<b>Net Position, Beginning of Year</b>	<u>724,868,611</u>	<u>967,371,703</u>	<u>1,692,240,314</u>
<b>Net Position, End of Year</b>	<u><u>\$ 775,206,145</u></u>	<u><u>\$ 1,044,333,712</u></u>	<u><u>\$ 1,819,539,857</u></u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows**  
**Year Ended April 30, 2018**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Activities</b>			
Cash received from customers	\$ 159,133,861	\$ 218,535,722	\$ 377,669,583
Receipts from interfund services provided	5,025,098	487,548	5,512,646
Cash paid to employees, including benefits	(30,497,058)	(30,961,655)	(61,458,713)
Cash paid to suppliers	(48,826,464)	(87,032,081)	(135,858,545)
Cash paid for interfund services used	(6,545,240)	(10,447,535)	(16,992,775)
Net cash provided by operating activities	<u>78,290,197</u>	<u>90,581,999</u>	<u>168,872,196</u>
<b>Noncapital Financing Activities</b>			
Payment-in-lieu of taxes	(1,893,742)	(2,502,435)	(4,396,177)
Loan to Flood Control Fund	(15,241,653)	-	(15,241,653)
Net cash used in noncapital financing activities	<u>(17,135,395)</u>	<u>(2,502,435)</u>	<u>(19,637,830)</u>
<b>Capital and Related Financing Activities</b>			
Acquisition and construction of capital assets	(56,029,439)	(87,474,608)	(143,504,047)
Proceeds from issuance of revenue bonds	-	181,295,210	181,295,210
Principal payments on revenue bonds and notes payable	(19,610,000)	(19,959,800)	(39,569,800)
Fiscal agent fees and interest paid on revenue bonds and notes payable	(16,739,498)	(17,561,884)	(34,301,382)
Proceeds from sale of capital assets	158,339	208,735	367,074
Proceeds from repayment of notes receivable	597,866	-	597,866
Net cash provided by (used in) capital and related financing activities	<u>(91,622,732)</u>	<u>56,507,653</u>	<u>(35,115,079)</u>
<b>Investing Activities</b>			
Investment purchases	(171,872,343)	(454,571,475)	(626,443,818)
Investment maturities and sales	206,649,713	311,406,117	518,055,830
Interest received on investments	(821,180)	(915,693)	(1,736,873)
Net cash provided by (used in) investing activities	<u>33,956,190</u>	<u>(144,081,051)</u>	<u>(110,124,861)</u>
<b>Net Increase in Cash and Cash Equivalents</b>	3,488,260	506,166	3,994,426
<b>Cash and Cash Equivalents, Beginning of Year</b>	<u>15,015,921</u>	<u>16,890,273</u>	<u>31,906,194</u>
<b>Cash and Cash Equivalents, End of Year</b>	<u>\$ 18,504,181</u>	<u>\$ 17,396,439</u>	<u>\$ 35,900,620</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows (Continued)**  
**Year Ended April 30, 2018**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Reconciliation of Operating Income to Net Cash</b>			
<b>Provided by Operating Activities</b>			
Operating income	\$ 56,977,284	\$ 66,914,801	\$ 123,892,085
Adjustments to reconcile operating income to net cash provided by operating activities			
Depreciation and amortization	21,354,867	33,656,813	55,011,680
Changes in asset, deferred outflows of resources, liabilities and deferred inflows of resources			
Accounts receivable and deferred outflows of resources	(3,847,307)	(6,435,570)	(10,282,877)
Inventories	987,333	122,529	1,109,862
Due from other funds	224,076	(1,048)	223,028
Accounts payable	(3,046,119)	(6,393,562)	(9,439,681)
Compensated absences	67,548	(53,390)	14,158
Accrued payroll and related expenses	126,967	276,736	403,703
Due to other funds	2,578	(224,033)	(221,455)
Claims liability	1,937,067	376,549	2,313,616
Customer deposits	568,327	-	568,327
Net pension liability	(1,694,594)	(1,135,464)	(2,830,058)
Deferred outflows of resources - pensions	4,694,890	3,522,107	8,216,997
Deferred inflows of resources - pensions	(88,132)	(69,083)	(157,215)
Other postemployment benefit obligation	25,412	24,614	50,026
Total adjustments	21,312,913	23,667,198	44,980,111
Net cash provided by operating activities	\$ 78,290,197	\$ 90,581,999	\$ 168,872,196
<b>Components of Cash and Cash Equivalents at End of Year</b>			
Unrestricted	\$ 4,297,595	\$ 6,499,609	\$ 10,797,204
Restricted	14,206,586	10,896,830	25,103,416
	\$ 18,504,181	\$ 17,396,439	\$ 35,900,620
<b>Noncash Activities</b>			
Contributions of capital assets	\$ 4,764,615	\$ 10,849,031	\$ 15,613,646
Change in fair value of investments	(1,864,122)	(1,915,553)	(3,779,675)
Accounts payable incurred for purchase of capital assets	6,041,531	20,862,575	26,904,106

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Activities</b>			
Cash received from customers	\$ 158,942,906	\$ 208,051,063	\$ 366,993,969
Receipts from interfund services provided	6,196,703	1,213,441	7,410,144
Cash paid to employees, including benefits	(31,759,866)	(31,495,163)	(63,255,029)
Cash paid to suppliers	(44,612,351)	(60,118,039)	(104,730,390)
Cash paid for interfund services used	(8,849,124)	(12,046,846)	(20,895,970)
Net cash provided by operating activities	<u>79,918,268</u>	<u>105,604,456</u>	<u>185,522,724</u>
<b>Noncapital Financing Activities</b>			
Payment-in-lieu of taxes	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
Net cash used in noncapital financing activities	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
<b>Capital and Related Financing Activities</b>			
Acquisition and construction of capital assets	(57,835,976)	(90,051,614)	(147,887,590)
Proceeds from issuance of revenue bonds	85,306,327	-	85,306,327
Principal payments on revenue bonds and notes payable	(16,485,000)	(21,493,700)	(37,978,700)
Fiscal agent fees and interest paid on revenue bonds and notes payable	(15,274,199)	(16,375,297)	(31,649,496)
Proceeds from sale of capital assets	115,593	120,632	236,225
Proceeds from repayment of notes receivable	496,395	-	496,395
Net cash used in capital and related financing activities	<u>(3,676,860)</u>	<u>(127,799,979)</u>	<u>(131,476,839)</u>
<b>Investing Activities</b>			
Investment purchases	(320,828,144)	(252,738,280)	(573,566,424)
Investment maturities and sales	258,413,339	284,519,125	542,932,464
Interest received on investments	144,911	849,639	994,550
Net cash provided by (used in) investing activities	<u>(62,269,894)</u>	<u>32,630,484</u>	<u>(29,639,410)</u>
<b>Net Increase in Cash and Cash Equivalents</b>	12,599,098	8,846,143	21,445,241
<b>Cash and Cash Equivalents, Beginning of Year</b>	<u>2,416,823</u>	<u>8,044,130</u>	<u>10,460,953</u>
<b>Cash and Cash Equivalents, End of Year</b>	<u><u>\$ 15,015,921</u></u>	<u><u>\$ 16,890,273</u></u>	<u><u>\$ 31,906,194</u></u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows (Continued)**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Reconciliation of Operating Income to Net Cash</b>			
<b>Provided by Operating Activities</b>			
Operating income	\$ 59,014,746	\$ 78,355,100	\$ 137,369,846
Adjustments to reconcile operating income to net cash provided by operating activities			
Depreciation and amortization	18,893,810	30,134,434	49,028,244
Changes in assets, deferred outflows of resources, liabilities and deferred inflows of resources			
Accounts receivable and special assessments receivable	(331,052)	(629,329)	(960,381)
Inventories	402,296	(14,450)	387,846
Due from other funds	72,387	(3,774)	68,613
Accounts payable	(6,129,089)	(5,756,846)	(11,885,935)
Compensated absences	(137,664)	280,310	142,646
Accrued payroll and related expenses	201,853	98,997	300,850
Due to other funds	4,681	23,660	28,341
Other liabilities	-	(112,608)	(112,608)
Claims liability	5,595,145	1,576,257	7,171,402
Customer deposits	46,513	-	46,513
Net pension liability	17,343,843	13,633,165	30,977,008
Deferred inflow/outflow of resources - pensions	(15,093,503)	(12,010,636)	(27,104,139)
Other postemployment benefit obligation	34,302	30,176	64,478
Total adjustments	20,903,522	27,249,356	48,152,878
Net cash provided by operating activities	\$ 79,918,268	\$ 105,604,456	\$ 185,522,724
<b>Components of Cash and Cash Equivalents at End of Year</b>			
Unrestricted	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Restricted	8,263,340	7,703,553	15,966,893
	\$ 15,015,921	\$ 16,890,273	\$ 31,906,194
<b>Noncash Activities</b>			
Contributions of capital assets	\$ 3,465,581	\$ 7,547,696	\$ 11,013,277
Change in fair value of investments	(841,730)	(1,048,249)	(1,889,979)
Accounts payable incurred for purchase of capital assets	5,698,786	17,501,373	23,200,159

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Note 1: Nature of Operations and Summary of Significant Accounting Policies**

***Nature of Operations and Reporting Entity***

The financial statements of the Water Services Department (KC Water or the “Department”) of the City of Kansas City, Missouri (the City) have been prepared in conformity with accounting principles generally accepted in the United States of America.

KC Water is comprised of the Water, Sewer and Storm funds, enterprise funds of the City of Kansas City, Missouri. The financial statements of KC Water present each major fund and the respective changes in their financial position and, where applicable, cash flows thereof as of April 30, 2018 and 2017, and for the years then ended in conformity with accounting principles generally accepted in the United States of America. The financial statements are not intended to present fairly the financial position of the City. The Water Fund is supported wholly by water service charges and is responsible for the administration, promotion, operation and maintenance of the water system. The Sewer Fund includes sewer and stormwater accounts. The Sewer Fund is supported wholly by sewer service charges and is responsible for the administration, promotion, operation and maintenance of the wastewater and stormwater systems.

***Basis of Accounting and Presentation***

The financial statements of KC Water have been prepared on the accrual basis of accounting using the economic resources measurement focus. Revenues, expenses, gains, losses, assets, liabilities and deferred inflows and outflows of resources from exchange and exchange-like transactions are recognized when the exchange transaction takes place, while those from government-mandated nonexchange transactions are recognized when all applicable eligibility requirements are met. Operating revenues and expenses include exchange transactions and program-specific, government-mandated nonexchange transactions. Government-mandated non-exchange transactions that are not program specific, investment income and interest on capital assets-related debt are included in non-operating revenues and expenses. KC Water first applies restricted net position when an expense or outlay is incurred for purposes for which both restricted and unrestricted net position are available.

***Cash and Cash Equivalents***

For purposes of the statements of cash flows, KC Water’s cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with original maturities of three months or less from date of acquisition.

***Investments***

All investments are reported at fair value. The fair value of marketable securities is based on quotations that are generally obtained from national securities exchanges. Where marketable securities are not listed on an exchange, quotations are obtained from brokerage firms or pricing services.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Accounts Receivable***

Accounts receivable balances are recorded at the invoiced amount. KC Water provides an allowance for doubtful accounts based upon a review of outstanding receivables, historical collection information and existing economic conditions.

***Revenue Recognition***

Revenues are recognized when earned. Unbilled revenue representing estimated consumer usage for the period between the last billing date and the end of the period is accrued by the Department.

***Inventories***

Inventories, consisting of repair parts, materials, supplies, chemicals, rock and fuel, are valued at cost.

***Prepaid Bond Insurance***

Prepaid bond insurance, net of accumulated amortization, represents insurance costs incurred in connection with the issuance of long-term debt. Such costs are being amortized over the term of the respective debt using the straight-line method.

***Capital Assets and Depreciation/Amortization***

Capital assets are stated at cost, including capitalized interest on construction, or estimated historical cost. These include assets funded by revenue and general obligation bonds, contributions and special assessments. Contributed assets are valued at acquisition value at the date of contribution. KC Water has a capitalization threshold of \$100,000 for building improvements, \$25,000 for land improvements, and \$5,000 for all other capitalizable assets.

Depreciation is provided on the straight-line method. Buildings, water lines and improvements are depreciated on a composite basis ranging from 40 to 100 years. Machinery and equipment are depreciated on a unit basis over useful lives of 3 to 20 years. Sewer and storm lines are depreciated on a composite basis with a useful life of 100 and 40 years, respectively. Treatment plants and other facilities are depreciated on a composite basis with useful lives of 25 to 55 years. Green infrastructure is depreciated on a composite basis with useful lives of 25 to 100 years. Land improvements are depreciated on a composite basis with useful lives of 20-30 years.

At the time of retirement or other disposition of assets for which depreciation is computed on the composite method, the original cost of the assets, net of any proceeds from their sale, are removed from the asset and accumulated depreciation accounts and no retirement gain or loss is recorded. For retirements or dispositions of assets for which depreciation is computed on the unit method, the asset and related depreciation accounts are eliminated and the difference between the net carrying value and any proceeds is recorded as a gain or loss.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Any conspicuous or known events, or changes in circumstances, affecting a capital asset are reviewed by the Department to determine whether there is a significant and unexpected decline in the service utility of the capital asset, which could indicate asset impairment.

Expenses for maintenance and repairs of property are charged to operations as incurred.

Interest costs capitalized on project-related debt for the years ended April 30, 2018 and 2017 totaled \$3,141,689 and \$2,952,110 for the Water Fund, respectively; \$5,167,337 and \$5,919,785 for the Sewer Fund, respectively.

***Deferred Outflows and Inflows of Resources***

A deferred outflow of resources is a consumption of net position by the Department that is applicable to a future reporting period and a deferred inflow of resources is an acquisition of net position that is applicable to a future reporting period.

**Water Fund:** As of April 30, 2018 and 2017, the Fund's deferred outflows of resources of \$14,589,493 and \$19,705,528, respectively, were comprised of deferred losses on bond refundings, changes in assumptions for the net pension liability, difference between projected and actual earnings on pension plan investments, change in the Water Fund's proportion of the net pension liability, and the Water Fund's contributions made subsequent to the measurement date of the net pension liability. As of April 30, 2018 and 2017, the Fund's deferred inflows of resources of \$521,618 and \$609,750, respectively, were comprised of the difference between projected and actual experience of plan participants.

**Sewer Fund:** As of April 30, 2018 and 2017, the Sewer Fund's deferred outflows of resources of \$12,226,490 and \$15,896,112, respectively, were comprised of deferred losses on bond refunding, changes in assumptions for the net pension liability, difference between projected and actual earnings on pension plan investments, change in the Sewer Fund's proportion of the net pension liability, and the Sewer Fund's contributions made subsequent to the measurement date of the net position liability. As of April 30, 2018 and 2017, the Sewer Fund's deferred inflows of resources of \$445,486 and \$514,569, respectively, were comprised of the difference between projected and actual experience of plan participants.

***Compensated Absences***

Under the terms of the City's personnel policy, KC Water employees are granted vacation and sick leave in varying amounts. Vacation is accumulated at the annual rate of 10 to 20 days, depending on the employee's length of service. Sick leave is accumulated at the rate of 3.7 hours per two-week pay period. The maximum amount of vacation that may be carried forward, which is accrued in the Water and Sewer Funds, is two times the amount earned in a year. Sick leave with pay may be accumulated up to a limit of 2,080 hours. Upon separation from service, employees may convert accrued sick leave at the ratio of four hours of sick leave to one hour of vacation leave credit.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Retiring employees 55 years or older with at least 25 years of creditable service; employees who are to receive a line-of-duty disability pension; and employees who qualify for a City pension and retire with a normal retirement, take early retirement at age 60 or thereafter, or die are entitled to sick leave credit at the rate of two hours of sick leave to one hour of vacation leave credit.

***Pension Plan***

For the purpose of measuring the net pension asset or liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the Employees' Retirement System (the Plan) and additions/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments (including refunds of employer contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. See *Note 10* for the retirement plan description.

***Net Position***

Net position of each major fund is classified in three components. Net investment in capital assets consists of capital assets net of accumulated depreciation and reduced by the outstanding balances of borrowings used to finance the purchase or construction of those assets, net of unspent proceeds. Restricted net position is made up of noncapital assets that must be used for a particular purpose as specified by creditors, grantors or donors external to each respective Fund, including amounts deposited with trustees as required by bond indentures, reduced by the outstanding balances of any related borrowings. Unrestricted net position is the remaining net position that does not meet the definition of net investment in capital assets or restricted.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and deferred inflows and outflows of resources and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

***Impact of Adoption of New Accounting Standard***

In 2018, the Department adopted the provisions of GASB Statement No. 82, *Pension Issues* – Amendment of GASB Statements No. 67, 68 and 73. This statement addresses certain issues that have been raised with respect to Statements No. 67, Statement No. 68 and Statement No. 73. Specifically, GASB 82 addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. Adoption did not have a significant impact on amounts reported or disclosed.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***New Accounting Pronouncements Not Yet Adopted***

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB Statement No. 75). The primary objective of this statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for all postemployment benefits (pensions and OPEB) with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity and creating additional transparency. The Department will implement GASB Statement No. 75 beginning with the year ending April 30, 2019.

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*, effective for periods beginning after June 15, 2018. The statement establishes uniform criteria for governments to recognize and measure certain asset retirement obligations (AROs).

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. The objective of this statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this statement are effective for the Department for the year ending December 31, 2019.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. The objective of this statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurements and application, and postemployment benefits (pensions and other postemployment benefits ([OPEB])). The requirements of this statement are effective for the Department for the year ending December 31, 2018.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*, effective for financial statements for fiscal years beginning after June 15, 2017. GASB 86 eliminates an inconsistency in the literature related to in-substance defeasance of debt. Under previous guidance, debt could only be considered defeased if there was a refunding. GASB 86 now allows defeasance treatment even if the government uses existing assets and does not issue new debt. However, any resulting gain or loss will be recognized in the period of the defeasance. GASB 86 also includes guidance on handling prepaid insurance in any debt extinguishment. Additionally, there is a new requirement for all in-substance defeasances to disclose any ability to substitute risk-free monetary assets with those that are not.

In June 2017, the GASB issued Statement No. 87, *Leases*, effective for reporting periods beginning after December 15, 2019. GASB 87 establishes a single approach to accounting for and reporting leases by state and local governments based on the principle that leases are financing of the right to use an underlying asset.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

The main rules of GASB 87 with respect to government entities that are lessees require that the lessees:

- Recognize the following: (a) a lease liability and (b) an intangible asset representing the lessee's right to use the leased asset; and
- Report in its financial statements: (a) amortization expense for using the lease asset over the shorter of the term of the lease or the useful life of the underlying asset, (b) interest expense on the lease liability and (c) note disclosures about the lease.

Under GASB 87, government entities that are lessors must:

- Recognize: (a) a lease receivable and (b) a deferred inflow of resources and continue to report the leased asset in its financial statements; and
- Report in its financial statements: (a) lease revenue, recognized over the term of the lease, corresponding with the reduction of the deferred inflow, (b) interest income on the receivable; and (c) note disclosures about the lease.

GASB 87 provides exceptions from the single-approach for short-term leases, financial purchases, leases of assets that are investments and certain regulated leases. GASB 87 also addresses accounting for lease terminations and modifications, sale-leaseback transactions, nonlease components embedded in lease contracts (such as service agreements), and leases with related parties.

In April 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* (GASB 88): GASB 88 specifies disclosures that should be made in the financial statements related to debt. It also provides a definition of debt so that governments know which types of liabilities should be included in those disclosures. If a government has direct borrowings or direct placements, disclosures related to these should be provided separately from disclosures related to other types of debt. GASB 88 is effective for financial statements for fiscal years beginning after June 15, 2018. Earlier application is permitted.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* (GASB 89). GASB 89 requires that interest costs incurred before the end of a construction period be recognized as expenses in the period in which the costs are incurred. As a result, the interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. GASB 89 is effective for financial statements for fiscal years beginning after December 15, 2019. Earlier application is encouraged. GASB 89 will be applied prospectively to interest incurred after the date of adoption.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

In August 2018, GASB issued Statement No. 90, *Majority Equity Interests* (GASB 90). GASB 90's primary objective is to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. GASB 90 defines a majority equity interest and specifies these reporting requirements. GASB 90 is effective for financial statements for fiscal years beginning after December 15, 2018. Earlier application is encouraged. GASB 90 will be applied retrospectively, except for certain provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100% equity interest. Those provisions should be applied on a prospective basis.

The Department has not completed its assessment of the impact of the adoption of these statements.

**Note 2: Deposits and Investments**

The City maintains a cash and investment pool that is available for use by all funds. The pool is comprised of demand and time deposits, repurchase agreements and other investments with maturities of less than five years. The Department's allocation of this pool was approximately 47.39% and 47.1% as of April 30, 2018 and 2017, respectively. As of April 30, 2018 and 2017, the carrying amount (book value) of the City's deposits, including certificates of deposit and the collateralized money market account was approximately \$30,015,000 and \$30,794,000, respectively, which was covered by federal depository insurance or by collateral held by the City's agents under joint custody agreements in accordance with the City's administrative code. The Department's allocation of deposits was \$14,603,543 and \$27,967,973 at April 30, 2018 and 2017, respectively.

The City of Kansas City, Missouri is empowered by City Charter to invest in the following types of securities:

1. *United States Treasury Securities (Bills, Notes, Bonds and Strips)*. The City may invest in obligations of the United States government for which the full faith and credit of the United States are pledged for the payment of principal and interest.
2. *United States Agency/GSE Securities*. The City may invest in obligations issued or guaranteed by any agency of the United States government and in obligations issued by any government-sponsored enterprise (GSE) that has a liquid market and a readily determinable market value that are described as follows:
  - a. U.S. Government Agency Coupon and Zero Coupon Securities.
  - b. U.S. Government Agency Callable Securities. Restricted to securities callable at par only.
  - c. U.S. Government Agency Step-Up Securities. The coupon rate is fixed for an initial term. At coupon date, the coupon rate rises to a new, higher fixed interest rate.
  - d. U.S. Government Agency Floating Rate Securities. Restricted to coupons with no interim caps that reset at least quarterly and that float off of only one index.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

- e. U.S. Government Agency Mortgage-Backed Securities (MBS, CMO, Pass-Thru Securities). Restricted to securities with final maturities of five (5) years or less or have the final projected payment no greater than five (5) years when analyzed in a +300 basis point interest rate environment.
- 3. *Repurchase Agreements.* The City may invest in contractual agreements between the City and commercial banks or primary government securities dealers. The Bond Market Association's guidelines for the Master Repurchase Agreement will be used and will govern all repurchase agreement transactions. All repurchase agreement transactions will be either physical delivery or tri-party.
- 4. *Bankers' Acceptances.* The City may invest in bankers' acceptances issued by domestic commercial banks possessing the highest rating issued by Moody's Investor Services, Inc. or Standard and Poor's Corporation.
- 5. *Commercial Paper.* The City may invest in commercial paper issued by domestic corporations, which has received the highest rating issued by Moody's Investor Services, Inc. or Standard and Poor's Corporation. Eligible paper is further limited to issuing corporations that have total assets in excess of five hundred million dollars (\$500,000,000) and are not listed on Credit Watch with negative implications by any nationally recognized rating agency at the time of purchase. In addition, the City's portfolio may not contain commercial paper of any one corporation, the total value of which exceeds 2% of the City's aggregate investment portfolio.
- 6. *Municipal Securities (State and Local Government Obligations).* The City may invest in municipal obligations that are issued in either tax-exempt or taxable form. The City's portfolio may not contain municipal obligations of any one issuer, the total value of which exceeds two percent (2%) of the City's aggregate investment portfolio, unless the obligation is pre-refunded or escrowed to maturity with securities guaranteed by the United States government.
  - a. Any full faith and credit obligations of the State of Missouri rated at least A or A2 by Standard and Poor's or Moody's.
  - b. Any full faith and credit obligations of any city, county or school district in the State of Missouri rated at least AA or Aa2 by Standard and Poor's or Moody's.
  - c. Any full faith and credit obligations or revenue bonds of the City of Kansas City, Missouri rated at least A or Aa2 by Standard and Poor's or Moody's.
  - d. Any full faith and credit obligation of any state or territory of the United States of America rated at least AA or Aa2 by Standard and Poor's or Moody's.
  - e. Any full faith and credit obligations of any city, county or school district in any state or territory of the United States of America rated at least AAA or Aaa by Standard and Poor's or Moody's.
  - f. Any revenue bonds issued by the Missouri Department of Transportation rated at least AA or Aa2 by Standard and Poor's or Moody's.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

- g. Any municipal obligation that is pre-refunded or escrowed to maturity as to both principal and interest with escrow securities that are fully guaranteed by the United States government, without regard to rating by Standard and Poor's or Moody's.

**Interest Rate Risk**

Interest rate risk is the risk that the fair value of the City's investments will decrease as a result of an increase in interest rates. As a means of limiting its exposure to fair value losses arising from rising interest rates, the City's investment policy limits the final maturity on any security owned to a maximum of five years. In addition, the City compares the weighted average maturity of its portfolio to the weighted average maturity of the Blended Bloomberg Barclay, U.S. Treasury/Agency 1-3 year Government/Agency index, and relative to the index, may decrease the weighted average maturity of the portfolio during periods of rising interest rates or increase it during periods of declining rates.

As of April 30, 2018, the City had the following investments and maturities (amounts are in thousands):

Investment Type	Fair Value	Investment Maturities (in Years)				Weighted Average
		Less Than 1	1 – 2	2 – 3	3 – 5	
Pooled investments						
U.S. Treasury bills	\$ 34,852	\$ 34,852	\$ -	\$ -	\$ -	0.23
U.S. Treasury notes/bonds	208,656	97,682	74,653	16,885	19,436	1.24
U.S. agency discounts	19,948	19,948	-	-	-	0.15
U.S. agencies – noncallable	608,153	219,430	146,667	113,372	128,684	1.84
U.S. agencies – callable	153,000	31,478	-	21,904	99,618	3.05
Total pooled	1,024,609	403,390	221,320	152,161	247,738	1.79
Non-pooled investments						
U.S. Treasury bills	57,343	57,343	-	-	-	0.15
U.S. Treasury notes/bonds	44,471	27,320	9,805	7,346	-	1.11
U.S. agency discounts	24,848	24,848	-	-	-	0.32
U.S. agencies – noncallable	163,313	74,331	81,663	7,319	-	1.02
U.S. agencies – callable	17,036	-	1,972	12,176	2,888	2.39
Total non-pooled	307,011	183,842	93,440	26,841	2,888	0.90
	\$ 1,331,620	\$ 587,232	\$ 314,760	\$ 179,002	\$ 250,626	1.59

The Department's allocation of pooled investments at April 30, 2018 was \$485,197,861. The Department's non-pooled investments at April 30, 2018 were \$267,441,678.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

As of April 30, 2017, the City had the following investments and maturities (amounts are in thousands):

Investment Type	Fair Value	Investment Maturities (in Years)				Weighted Average
		Less Than 1	1 – 2	2 – 3	3 – 5	
Pooled investments						
U.S. Treasury bills	\$ 6,999	\$ 6,999	\$ -	\$ -	\$ -	1.01
U.S. Treasury notes/bonds	213,168	46,063	70,799	68,811	27,495	1.80
U.S. agency discounts	19,989	19,989	-	-	-	0.07
U.S. agencies – noncallable	553,281	251,433	155,655	72,662	73,531	1.50
U.S. agencies – callable	186,366	88,553	9,974	13,574	74,265	2.28
Total pooled	979,803	413,037	236,428	155,047	175,291	1.39
Non-pooled investments						
U.S. Treasury notes/bonds	9,920	-	-	9,920	-	1.38
U.S. agency discounts	29,914	29,914	-	-	-	0.87
U.S. agencies – noncallable	136,716	76,937	49,732	10,047	-	1.10
U.S. agencies – callable	7,431	-	-	1,989	5,442	1.38
Total non-pooled	183,981	106,851	49,732	21,956	5,442	1.16
	\$ 1,163,784	\$ 519,888	\$ 286,160	\$ 177,003	\$ 180,733	1.37

The Department's allocation of pooled investments at April 30, 2017 was \$453,986,782. The Water Fund's non-pooled investments at April 30, 2017 were \$169,066,270.

Some of the restricted assets are held by a trustee associated with the proceeds from sewer state revolving bonds within the Sewer Fund. The amount held by the trustee includes investments that are insured or registered or for which securities are held by the Sewer Fund or its agent in the Sewer Fund's name or under joint agreements. Restricted assets held by the trustee were \$3,872,403 and \$3,930,371 at April 30, 2018 and 2017, respectively, and consisted primarily of money market funds.

**Callable Agency Securities.** The City actively monitors its callable bond portfolio with respect to probability of call relative to market rates of interest. As of April 30, 2018 and 2017, the total fair value of the City's callable bond portfolio (pooled and non-pooled) is \$170,036,000 and \$193,796,940, respectively.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Credit Risk**

Credit risk is the risk that the City will not recover its investments due to the ability of the counterparty to fulfill its obligation. In order to prevent over concentration by investment type and thereby mitigate credit risk, the City's Investment Policy provides for diversification of the portfolio by investment type as follows:

<b>Investment Type</b>	<b>Maximum</b>
U.S. Treasury securities and government guaranteed securities	100%
Collateralized time and demand deposits	100%
U.S. government agency and GSE securities	80%
Collateralized repurchase agreements	50%
U.S. agency callable securities	30%
Commercial paper	30%
Bankers acceptances	30%
Qualified municipal obligations	30%

As of April 30, 2018, the City had the following nongovernmental guaranteed securities that are rated by both Moody's and Standard & Poor's (amounts are in thousands):

	<b>Fair Value</b>	<b>Moody's/ S&amp;P Ratings</b>
U.S. agency securities	\$ 986,298	Aaa/AA+

As of April 30, 2017, the City had the following nongovernmental guaranteed securities that are rated by both Moody's and Standard & Poor's (amounts are in thousands):

	<b>Fair Value</b>	<b>Moody's/ S&amp;P Ratings</b>
U.S. agency securities	\$ 933,697	Aaa/AA+

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Custodial Credit Risk***

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of an outside party (*i.e.*, the City's safekeeping institution).

The City's investment policy requires that all funds on deposit with any financial institution be secured with collateral securities in an amount equal to at least 102 percent of the deposit less any amount insured by the Federal Deposit Insurance Corporation (FDIC), or any other governmental agency performing a similar function. As of April 30, 2018 and 2017, all deposits were adequately and fully collateralized.

The City's investment policy required that all investment securities be held in the City's name in the City's safekeeping account at its safekeeping institution, thereby mitigating custodial credit risk. As of April 30, 2018 and 2017, all investment securities were in the City's name in the City's safekeeping accounts at its safekeeping institutions. In addition, all collateral securities were in the City's joint custody account(s) at the Federal Reserve Bank and were either U.S. Treasury (U.S. government guaranteed) or U.S. agency (Aaa/AA+ rated) obligations with the exception of an Irrevocable Letter of Credit issued in the City's favor by the Federal Home Loan Bank in the amount of \$35,000,000 to secure the City's deposits at Commerce Bank. The current Letter of Credit expires May 31, 2018, and is safekept in the City's cash vault in the Cash Operations section of the Treasury Division. In addition, there are two Irrevocable Letters of Credit issued in the City's favor by the Federal Home Loan Bank in the amount of \$5,000,000 each to secure Certificates of Deposit. The two Letters of Credit expire December 17, 2018 and November 18, 2019, and are also safekept in the City's cash vault in the Cash Operations section of the Treasury Division.

***Concentration of Credit Risk***

At April 30, 2018, more than five percent of the City's investments are in the following U.S. agency discount note/securities: Federal Farm Credit Bank, Federal Home Loan Bank, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association. These investments are 7%, 31%, 13% and 21%, respectively, of the City's total investments.

At April 30, 2017, more than five percent of the City's investments are in the following U.S. agency discount note/securities: Federal Farm Credit Bank, Federal Home Loan Bank, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association. These investments are 12%, 29%, 13% and 24%, respectively, of the City's total investments.

In the City's opinion, the debt securities issued by these agencies do not have an explicit government guarantee, but rather an implied guarantee and, therefore, the City does not impose limits as to the concentration of any one agency. However, total agency securities in the portfolio are limited by the investment policy to 80% of the total portfolio value.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Summary**

The following is a complete listing of cash and investments held by KC Water at April 30, 2018 and 2017:

	<b>2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Deposits	\$ 6,031,681	\$ 8,571,862	\$ 14,603,543
Pooled investments	199,920,510	285,277,351	485,197,861
Non-pooled investments	62,142,000	205,299,678	267,441,678
Trustee accounts	-	3,872,403	3,872,403
Total	<u>\$ 268,094,191</u>	<u>\$ 503,021,294</u>	<u>\$ 771,115,485</u>

	<b>2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Deposits	\$ 15,009,021	\$ 12,960,952	\$ 27,969,973
Pooled investments	202,550,158	251,436,624	453,986,782
Non-pooled investments	79,960,000	89,106,270	169,066,270
Trustee accounts	-	3,930,371	3,930,371
Total	<u>\$ 297,519,179</u>	<u>\$ 357,434,217</u>	<u>\$ 654,953,396</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

The deposits and investments of KC Water at April 30, 2018 and 2017 are reflected in the statements of net position as follows:

	<b>2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Current assets			
Unrestricted			
Cash and cash equivalents	\$ 4,297,595	\$ 6,499,609	\$ 10,797,204
Investments	16,160,547	24,480,237	40,640,784
Restricted			
Cash and cash equivalents	14,206,586	10,896,830	25,103,416
Investments	6,531,290	85,048,457	91,579,747
Investments	126,217,735	191,196,502	317,414,237
Restricted investments	100,680,438	184,899,659	285,580,097
	<u>                    </u>	<u>                    </u>	<u>                    </u>
Total	<u>\$ 268,094,191</u>	<u>\$ 503,021,294</u>	<u>\$ 771,115,485</u>
	<b>2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Current assets			
Unrestricted			
Cash and cash equivalents	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Investments	12,578,071	17,156,604	29,734,675
Restricted			
Cash and cash equivalents	8,263,340	7,703,553	15,966,893
Investments	31,018,467	21,038,276	52,056,743
Investments	123,832,470	168,816,009	292,648,479
Restricted investments	115,074,250	133,533,055	248,607,305
	<u>                    </u>	<u>                    </u>	<u>                    </u>
Total	<u>\$ 297,519,179</u>	<u>\$ 357,434,217</u>	<u>\$ 654,953,396</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Note 3: Accounts Receivable**

A summary of accounts receivable at April 30, 2018 and 2017 is as follows:

	<b>April 30, 2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Residential and commercial customers	\$ 25,934,393	\$ 30,813,229	\$ 56,747,622
Unbilled utility revenue	10,001,844	12,880,683	22,882,527
Intermunicipal sewer customers	-	8,741,622	8,741,622
Other accounts receivable	521,112	89,107	610,219
	<u>36,457,349</u>	<u>52,524,641</u>	<u>88,981,990</u>
Less allowance for doubtful accounts	<u>12,117,538</u>	<u>13,878,076</u>	<u>25,995,614</u>
Net accounts receivable	<u>\$ 24,339,811</u>	<u>\$ 38,646,565</u>	<u>\$ 62,986,376</u>

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Residential and commercial customers	\$ 24,512,510	\$ 26,312,964	\$ 50,825,474
Unbilled utility revenue	9,167,630	10,420,970	19,588,600
Intermunicipal sewer customers	-	9,238,862	9,238,862
Other accounts receivable	-	193,052	193,052
	<u>33,680,140</u>	<u>46,165,848</u>	<u>79,845,988</u>
Less allowance for doubtful accounts	<u>13,187,636</u>	<u>13,954,853</u>	<u>27,142,489</u>
Net accounts receivable	<u>\$ 20,492,504</u>	<u>\$ 32,210,995</u>	<u>\$ 52,703,499</u>

**Note 4: Notes Receivable**

The Water Fund has built several major transmission mains to reach wholesale customers. These customers agree to pay for a proportionate share of the main based on their projected use of the capacity. At the time they start using the main, they can either pay the entire amount or pay the Water Fund over a time period at an interest rate tied to the bond interest rate. The monthly payment is included in their water billing.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Notes receivable outstanding consist of the following issues at April 30, 2018 and 2017:

<b>Customer</b>	<b>Interest Rates</b>	<b>Loan Completion Date</b>	<b>2018</b>	<b>2017</b>
Dogwood Energy	5.565%	February 2023	\$ 1,466,368	\$ 1,715,085
Platte County PWSD #2	4.126	April 2026	212,354	234,310
City of Dearborn	4.126	April 2026	161,286	201,543
Cass County PWSD #3	4.394	January 2028	-	100,208
Lee's Summit	4.238	March 2028	1,896,022	2,046,698
Cass County PWSD #10	4.238	November 2029	550,365	586,417
			<u>4,286,395</u>	<u>4,884,261</u>
Less current portion			<u>(526,276)</u>	<u>(508,778)</u>
Noncurrent portion			<u>\$ 3,760,119</u>	<u>\$ 4,375,483</u>

**Note 5: Capital Assets**

Capital asset activity for the year ended April 30, 2018 is as follows:

<b>Water Fund</b>	<b>May 1, 2017</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2018</b>
Depreciable assets				
Buildings	\$ 178,150,081	\$ 6,801,103	\$ (1,890,020)	\$ 183,061,164
Utility lines and improvements	845,509,347	71,946,325	(5,260,471)	912,195,201
Machinery and equipment	<u>99,023,157</u>	<u>3,223,758</u>	<u>(3,246,175)</u>	<u>99,000,740</u>
Total depreciable assets	<u>1,122,682,585</u>	<u>81,971,186</u>	<u>(10,396,666)</u>	<u>1,194,257,105</u>
Accumulated depreciation				
Buildings	(73,278,817)	(2,953,486)	1,890,020	(74,342,283)
Utility lines and improvements	(106,087,875)	(12,725,457)	5,260,470	(113,552,862)
Machinery and equipment	<u>(36,360,886)</u>	<u>(5,552,740)</u>	<u>3,091,342</u>	<u>(38,822,284)</u>
Total accumulated depreciation	<u>(215,727,578)</u>	<u>(21,231,683)</u>	<u>10,241,832</u>	<u>(226,717,429)</u>
Total depreciable assets, net	<u>906,955,007</u>	<u>60,739,503</u>	<u>(154,834)</u>	<u>967,539,676</u>
Nondepreciable assets				
Land and permanent right of ways	4,178,312	724,602	-	4,902,914
Construction in process	<u>38,215,233</u>	<u>54,012,879</u>	<u>(68,477,546)</u>	<u>23,750,566</u>
Total nondepreciable assets	<u>42,393,545</u>	<u>54,737,481</u>	<u>(68,477,546)</u>	<u>28,653,480</u>
Capital assets, net	<u>\$ 949,348,552</u>	<u>\$ 115,476,984</u>	<u>\$ (68,632,380)</u>	<u>\$ 996,193,156</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

<b>Sewer Fund</b>	<b>May 1, 2017</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2018</b>
Depreciable assets				
Sewerage treatment plant and other facilities	\$ 339,584,763	\$ 13,649,992	\$ (13,737,684)	\$ 339,497,071
Sewer lines	962,542,618	115,670,216	(8,241,765)	1,069,971,069
Equipment	126,592,273	37,522,903	(5,641,411)	158,473,765
Land improvements	-	9,874,427	54,662	9,929,089
Green infrastructure	-	8,671,373	-	8,671,373
	<u>1,428,719,654</u>	<u>185,388,911</u>	<u>(27,566,198)</u>	<u>1,586,542,367</u>
Accumulated depreciation				
Sewerage treatment plant and other facilities	(221,559,092)	(8,261,658)	13,685,148	(216,135,602)
Sewer lines	(122,178,690)	(15,627,759)	8,241,763	(129,564,686)
Equipment	(51,599,049)	(9,258,839)	5,137,472	(55,720,416)
Land improvements	-	(436,515)	(2,126)	(438,641)
Green infrastructure	-	(72,042)	-	(72,042)
	<u>(395,336,831)</u>	<u>(33,656,813)</u>	<u>27,062,257</u>	<u>(401,931,387)</u>
Total depreciable assets, net	<u>1,033,382,823</u>	<u>151,732,098</u>	<u>(503,941)</u>	<u>1,184,610,980</u>
Nondepreciable assets				
Land and permanent right of ways	13,401,078	479,317	-	13,880,395
Construction in process	110,498,840	102,502,021	(166,589,447)	46,411,414
	<u>123,899,918</u>	<u>102,981,338</u>	<u>(166,589,447)</u>	<u>60,291,809</u>
Capital assets, net	<u>\$1,157,282,741</u>	<u>\$ 254,713,436</u>	<u>\$ (167,093,388)</u>	<u>\$ 1,244,902,789</u>
Total Department Capital Asset, net	<u>\$2,106,631,293</u>	<u>\$ 370,190,420</u>	<u>\$ (235,725,768)</u>	<u>\$ 2,241,095,945</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Capital asset activity for the year ended April 30, 2017 is as follows:

<b>Water Fund</b>	<b>May 1, 2016</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2017</b>
Depreciable assets				
Buildings	\$ 173,549,863	\$ 12,998,983	\$ (8,398,765)	\$ 178,150,081
Utility lines and improvements	773,237,115	75,274,425	(3,002,193)	845,509,347
Machinery and equipment	75,320,442	24,872,932	(1,170,217)	99,023,157
Total depreciable assets	<u>1,022,107,420</u>	<u>113,146,340</u>	<u>(12,571,175)</u>	<u>1,122,682,585</u>
Accumulated depreciation				
Buildings	(79,274,944)	(2,402,638)	8,398,765	(73,278,817)
Utility lines and improvements	(97,923,491)	(11,166,577)	3,002,193	(106,087,875)
Machinery and equipment	(32,213,967)	(5,201,414)	1,054,495	(36,360,886)
Total accumulated depreciation	<u>(209,412,402)</u>	<u>(18,770,629)</u>	<u>12,455,453</u>	<u>(215,727,578)</u>
Total depreciable assets, net	<u>812,695,018</u>	<u>94,375,711</u>	<u>(115,722)</u>	<u>906,955,007</u>
Nondepreciable assets				
Land and permanent right of ways	4,089,224	89,088	-	4,178,312
Construction in process	84,956,648	52,217,360	(98,958,775)	38,215,233
Total nondepreciable assets	<u>89,045,872</u>	<u>52,306,448</u>	<u>(98,958,775)</u>	<u>42,393,545</u>
Capital assets, net	<u>\$ 901,740,890</u>	<u>\$ 146,682,159</u>	<u>\$ (99,074,497)</u>	<u>\$ 949,348,552</u>



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

<b>Sewer Fund</b>	<b>May 1, 2016</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2017</b>
Depreciable assets				
Sewerage treatment plant and other facilities	\$ 341,153,397	\$ 3,490,054	\$ (5,058,688)	\$ 339,584,763
Sewer lines	892,921,550	73,782,375	(4,161,307)	962,542,618
Equipment	105,420,212	23,193,551	(2,021,490)	126,592,273
Total depreciable assets	<u>1,339,495,159</u>	<u>100,465,980</u>	<u>(11,241,485)</u>	<u>1,428,719,654</u>
Accumulated depreciation				
Sewerage treatment plant and other facilities	(218,381,759)	(8,236,021)	5,058,688	(221,559,092)
Sewer lines	(111,793,340)	(14,546,657)	4,161,307	(122,178,690)
Equipment	(46,019,880)	(7,420,376)	1,841,207	(51,599,049)
Total accumulated depreciation	<u>(376,194,979)</u>	<u>(30,203,054)</u>	<u>11,061,202</u>	<u>(395,336,831)</u>
Total depreciable assets, net	<u>963,300,180</u>	<u>70,262,926</u>	<u>(180,283)</u>	<u>1,033,382,823</u>
Nondepreciable assets				
Land and permanent right of ways	13,384,572	16,506	-	13,401,078
Construction in process	90,994,178	105,143,209	(85,638,547)	110,498,840
Total nondepreciable assets	<u>104,378,750</u>	<u>105,159,715</u>	<u>(85,638,547)</u>	<u>123,899,918</u>
Capital assets, net	<u>\$1,067,678,930</u>	<u>\$ 175,422,641</u>	<u>\$ (85,818,830)</u>	<u>\$ 1,157,282,741</u>
Total Department Capital Asset, net	<u>\$1,969,419,820</u>	<u>\$ 322,104,800</u>	<u>\$ (184,893,327)</u>	<u>\$ 2,106,631,293</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Note 6: Long-Term Obligations and Restricted Assets**

Revenue bonds and notes payable outstanding consist of the following issues at April 30, 2018 and 2017:

<b>Issue</b>	<b>Interest Rates</b>	<b>Maturity Through</b>	<b>2018</b>	<b>2017</b>
<b>Water Fund</b>				
2008 Series A	4.66%	December 2027	\$ 22,175,000	\$ 23,885,000
2009 Series A	2.00 – 5.25%	December 2032	97,625,000	107,905,000
2012 Series A	1.00 – 5.00%	December 2036	39,255,000	40,700,000
2013 Series A	2.00 – 4.00%	December 2037	51,090,000	52,655,000
2014 Series A	2.00 – 5.00%	December 2038	50,280,000	51,975,000
2015 Series A	3.25 – 5.00%	December 2039	58,380,000	58,865,000
2017 Series A	3.13 – 5.00%	December 2041	75,700,000	78,130,000
<b>Sewer Fund</b>				
State Series 1998A	3.90% – 5.25%	January 2019	695,000	1,360,000
State Series 1999A	3.625% – 5.25%	January 2020	870,000	1,275,000
State Series 2000A	4.60% – 5.75%	July 2020	2,320,000	3,055,000
State Series 2000B	4.25% – 5.625%	July 2020	2,090,000	2,755,000
Stormwater 2000	1.70%	December 2020	218,800	289,600
Stormwater 2001 & 2002	1.60%	December 2021	1,313,000	1,632,000
State Series 2001B	3.00% – 5.375%	July 2022	5,050,000	5,985,000
State Series 2002J	2.00% – 5.50%	July 2022	3,015,000	3,570,000
Series 2004H	3.00% – 5.25%	January 2025	4,235,000	4,775,000
Stormwater 2007	1.40%	June 2027	223,000	243,000
Series 2009A	2.50% – 5.25%	January 2034	53,105,000	55,400,000
Series 2009B	1.480%	July 2030	9,390,900	10,065,900
Series 2011A	2.00% – 5.00%	January 2037	73,135,000	76,060,000
Series 2012A	2.00% – 5.00%	January 2037	65,245,000	68,295,000
Series 2016A	2.00% – 5.00%	January 2040	170,885,000	176,990,000
Series 2018A	3.125% - 5.00%	January 2042	165,000,000	-
			<u>951,295,700</u>	<u>825,865,500</u>
Add premiums			75,012,864	61,585,379
Less				
Current portion			(44,861,300)	(39,571,818)
Discount			<u>(1,475,424)</u>	<u>(1,273,654)</u>
Noncurrent revenue bonds and notes payable			<u>\$ 979,971,840</u>	<u>\$ 846,605,407</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Changes in long-term obligations during the year ended April 30, 2018 are as follows:

	<b>May 1, 2017</b>	<b>Additions</b>	<b>Reductions</b>	<b>April 30, 2018</b>	<b>Due Within One Year</b>
<b>Water Fund</b>					
Revenue bonds	\$ 414,115,000	\$ -	\$ (19,610,000)	\$ 394,505,000	\$ 19,625,000
Less					
Unamortized bond discount	(508,869)	-	22,740	(486,129)	-
Add					
Unamortized bond premium	28,765,487	-	(1,416,430)	27,349,057	-
Net pension liability	30,723,968	1,492,703	(3,187,297)	29,029,374	-
Net other postemployment benefit obligations	5,437,790	577,556	(552,144)	5,463,202	-
Compensated absences	3,555,002	708,296	(640,748)	3,622,550	873,522
Claims payable	16,663,646	5,621,922	(3,684,855)	18,600,713	4,189,080
	<u>498,752,024</u>	<u>8,400,477</u>	<u>(29,068,734)</u>	<u>478,083,767</u>	<u>24,687,602</u>
<b>Sewer Fund</b>					
Revenue bonds and notes payable	411,750,500	165,000,000	(19,959,800)	556,790,700	25,236,300
Less					
Unamortized bond discount	(764,785)	(262,682)	38,172	(989,295)	-
Add					
Unamortized bond premium	32,819,892	16,557,891	(1,713,977)	47,663,806	-
Net pension liability	25,927,891	1,586,635	(2,722,099)	24,792,427	-
Net other postemployment benefit obligations	4,592,153	507,130	(482,516)	4,616,767	-
Compensated absences	2,849,739	516,581	(569,971)	2,796,349	726,119
Claims payable	7,348,785	1,734,391	(1,357,842)	7,725,334	1,762,357
	<u>484,524,175</u>	<u>185,639,946</u>	<u>(26,768,033)</u>	<u>643,396,088</u>	<u>27,724,776</u>
<b>Total Department</b>	<u>\$ 983,276,199</u>	<u>\$ 194,040,423</u>	<u>\$ (55,836,767)</u>	<u>\$1,121,479,855</u>	<u>\$ 52,412,378</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Changes in long-term obligations during the year ended April 30, 2017 are as follows:

	<b>May 1, 2016</b>	<b>Additions</b>	<b>Reductions</b>	<b>April 30, 2017</b>	<b>Due Within One Year</b>
<b>Water Fund</b>					
Revenue bonds	\$ 352,470,000	\$ 78,130,000	\$ (16,485,000)	\$ 414,115,000	\$ 19,610,000
Less					
Unamortized bond discount	(364,233)	(161,925)	17,289	(508,869)	-
Add					
Unamortized bond premium	22,596,586	7,338,252	(1,169,351)	28,765,487	-
Net pension liability	13,380,125	20,316,304	(2,972,461)	30,723,968	-
Net other postemployment benefit obligations	5,403,488	553,270	(518,968)	5,437,790	-
Compensated absences	3,692,666	476,000	(613,664)	3,555,002	833,384
Claims payable	11,068,501	9,664,009	(4,068,864)	16,663,646	4,158,719
	<u>408,247,133</u>	<u>116,315,910</u>	<u>(25,811,019)</u>	<u>498,752,024</u>	<u>24,602,103</u>
Total Water Fund					
	<u>408,247,133</u>	<u>116,315,910</u>	<u>(25,811,019)</u>	<u>498,752,024</u>	<u>24,602,103</u>
<b>Sewer Fund</b>					
Revenue bonds and notes payable	433,244,200	-	(21,493,700)	411,750,500	19,961,818
Less					
Unamortized bond discount	(804,562)	-	39,777	(764,785)	-
Add					
Unamortized bond premium	34,437,602	-	(1,617,710)	32,819,892	-
Net pension liability	11,291,458	17,144,886	(2,508,453)	25,927,891	-
Net other postemployment benefit obligations	4,561,977	473,782	(443,606)	4,592,153	-
Compensated absences	2,569,429	850,000	(569,690)	2,849,739	731,196
Claims payable	5,772,528	3,648,323	(2,072,066)	7,348,785	1,990,183
	<u>491,072,632</u>	<u>22,116,991</u>	<u>(28,665,448)</u>	<u>484,524,175</u>	<u>22,683,197</u>
Total Sewer Fund					
	<u>491,072,632</u>	<u>22,116,991</u>	<u>(28,665,448)</u>	<u>484,524,175</u>	<u>22,683,197</u>
<b>Total Department</b>	<u>\$ 899,319,765</u>	<u>\$ 138,432,901</u>	<u>\$ (54,476,467)</u>	<u>\$ 983,276,199</u>	<u>\$ 47,285,300</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

The annual requirements to retire the bonds and notes payable outstanding as of April 30, 2018 are as follows:

Year Ending April 30	Water Fund		Sewer Fund		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 19,625,000	\$ 16,645,268	\$ 25,236,300	\$ 22,784,347	\$ 44,861,300	\$ 48,020,647
2020	20,425,000	15,854,824	24,474,000	22,713,165	44,899,000	38,567,989
2021	21,245,000	15,011,079	24,950,300	21,676,186	46,195,300	36,687,265
2022	20,515,000	14,047,592	24,266,000	20,664,012	44,781,000	34,711,604
2023	21,315,000	13,207,645	24,026,600	19,680,766	45,341,600	32,888,411
2024 - 2028	93,390,000	52,247,063	116,657,900	83,043,096	210,047,900	135,290,159
2029 - 2033	88,685,000	32,619,063	134,839,600	54,255,974	223,524,600	86,875,037
2034 - 2038	79,210,000	15,145,544	123,755,000	25,366,012	202,965,000	40,511,556
2039 - 2043	30,095,000	2,468,600	58,585,000	5,149,050	88,680,000	7,617,650
	<u>\$ 394,505,000</u>	<u>\$ 177,246,678</u>	<u>\$ 556,790,700</u>	<u>\$ 275,332,608</u>	<u>\$ 951,295,700</u>	<u>\$ 461,170,318</u>

The amount of outstanding advance refunding of insubstance defeased debt as of April 30, 2018 and 2017 of the Water Fund was a total of \$33,000,000 and \$37,250,000, respectively.

All funds obtained through the issuance of water revenue bonds are restricted for the purpose of extending and improving the facilities of the Water Fund. All debt service requirements are payable solely from revenues generated by the Water Fund. Under the terms of the ordinances enacted at the time of the issuance of the revenue bonds, the 2009A, 2012A, 2013A, 2014A, 2015A and 2017A bonds (Senior Bonds) share equal claim to the revenue generated by the Water Fund. The pledge of revenue is senior to the pledge of such revenues for the payment of the 2008A bonds (Subordinate Bond). The ordinances require the City to maintain adequate insurance coverage and establish the priority for the allocation of revenue generated by the Water Fund.

All funds obtained through the issuance of sewer revenue bonds are restricted for the purpose of extending and improving the Sewerage System. All debt service requirements of these bonds are payable solely from revenues generated by the Sewer Fund. The revenue bond ordinances require the Sewer Fund to maintain adequate insurance coverage and employ an independent consulting engineer to evaluate the physical condition and operation of the sewerage system on a periodic basis. In addition, the ordinance established the priority for the allocation of revenue generated by the sewerage system.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

After the Water and Sewer Funds meet normal operating and maintenance expenses of each fund, respectively, all remaining moneys are to be allocated to the following accounts in the order listed below:

<b>Account</b>	<b>Restriction</b>
Principal and interest	For the monthly accumulation of moneys to meet the maturing revenue bond principal and interest requirement. Each month, the City is to set aside 1/6 of the next semiannual interest payment and 1/12 of the next annual principal payment.
Construction	For recording bond proceeds to be used to finance construction.
Renewal and replacement	For the monthly accumulation of moneys, up to an amount equal to the prior year annual depreciation plus additional amounts to cover future budgeted capital improvements, to pay for the maintenance and replacements necessary to keep the system operating efficiently.

The bond ordinances also require that the Water and Sewer Funds establish additional reserve accounts for the retirement of the bonds totaling \$74,120,466 and \$65,182,966 at April 30, 2018, and 2017, respectively. However, in lieu of setting aside cash, the ordinances allow the Funds to obtain insurance policies. The Water and Sewer Funds have obtained insurance policies to satisfy \$15,304,827 a year of the reserve requirements. As of April 30, 2018 and 2017, both the Water and Sewer Fund's debt service coverage ratios were above the 130% threshold, so the remaining bond reserve accounts were not required to be funded.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Restricted accounts are reported on the accompanying statements of net position as restricted assets for 2018 and 2017 as follows:

	<b>April 30, 2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Principal and interest	\$ 15,395,672	\$ 17,171,558	\$ 32,567,230
Debt service reserve	-	5,008,338	5,008,338
Construction	73,503,324	218,645,538	292,148,862
Renewal and replacement	30,105,460	41,168,183	71,273,643
Retention pond maintenance	-	52,342	52,342
Customer deposits	3,064,256	-	3,064,256
	<u>\$ 122,068,712</u>	<u>\$ 282,045,959</u>	<u>\$ 404,114,671</u>

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Principal and interest	\$ 14,498,410	\$ 14,553,831	\$ 29,052,241
Debt service reserve	-	5,140,876	5,140,876
Construction	107,667,363	101,850,493	209,517,856
Renewal and replacement	30,072,505	41,088,042	71,160,547
Retention pond maintenance	-	51,814	51,814
Customer deposits	2,491,202	-	2,491,202
	<u>\$ 154,729,480</u>	<u>\$ 162,685,056</u>	<u>\$ 317,414,536</u>

**Note 7: Pledged Revenues**

Water Fund – The City has pledged revenues of the Water Fund, net of specified operating expenses, to repay \$394,505,000 in water revenue bonds. The bonds were issued to provide improvements to the water system and facilities. The various issues and maturity dates are listed in *Note 6*. The bonds are payable solely from the revenues derived by the Water Fund. Annual principal and interest payments on the bonds and capital leases are expected to require approximately 28% of net revenues on average over the next 24 years. The total principal and interest remaining to be paid on the bonds is \$571,751,678. Principal and interest paid for the year ended April 30, 2018 and total net revenues were \$36,332,648 and \$85,154,327, respectively.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Sewer Fund – They City has pledged revenues of the Sewer Fund, net of specified operating expenses, to repay sewer system revenue bonds and loans. The bonds were issued to provide improvements to the sewer system and facilities. The loans were issued to fund stormwater basin studies and improvements. The various issues and maturity dates are listed in *Note 6*.

The sewer bonds through and including 1998A are senior bonds that have claim to both sewer and stormwater revenue. Those bonds will be paid off in January of 2019. Total principal and interest on those bonds is \$729,750, which is expected to require 1% of net sewer and stormwater revenues. The remaining sewer bonds are subordinate bonds that have claim to only sewer revenues. Total principal and interest on those bonds is \$829,562,578 and is expected to require approximately 33% of net sewer revenues. The stormwater loans are payable from stormwater revenues. Total principal and interest on those loans is \$1,830,982 and is expected to require more than what is available from the net stormwater revenues. Principal and interest paid for the year ended April 30, 2018 and net revenues for the Sewer Fund were \$37,028,647 and \$102,027,200, respectively.

**Note 8: Due to/from Other City Funds**

Amounts due to/from other City funds at April 30, 2018 were as follows:

	<b>Receivables</b>			
	<b>Water</b>	<b>Sewer</b>	<b>General</b>	<b>Total</b>
<b>Payables</b>				
Water Fund	\$ -	\$ 7,259	\$ 385,000	\$ 392,259
Sewer Fund	29,852	-	-	29,852
Flood Control Fund	15,241,654	-	-	15,241,654
General Fund	-	1,043	-	1,043
	<u>\$ 15,271,506</u>	<u>\$ 8,302</u>	<u>\$ 385,000</u>	<u>\$ 15,664,808</u>



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Amounts due to/from other City funds at April 30, 2017 were as follows:

<b>Payables</b>	<b>Receivables</b>			<b>Total</b>
	<b>Water</b>	<b>Sewer</b>	<b>General</b>	
Water Fund	\$ -	\$ 4,680	\$ 385,001	\$ 389,681
Sewer Fund	253,885	-	-	253,885
General Fund	44	2,574	-	2,618
	<u>\$ 253,929</u>	<u>\$ 7,254</u>	<u>\$ 385,001</u>	<u>\$ 646,184</u>

Amounts due from and due to the Water and Sewer Funds represent reimbursement of operating costs between the two funds. Amounts due from and due to the General fund represent reimbursement of operating costs between the funds.

In 2018, the Water Fund transferred \$15,241,654 to the City's Flood Control Fund to assist with flood control projects. This receivable is recorded on the statement of net position as due from other funds and is expected to be repaid with general obligation bonds issued by the City in Fiscal year 2019 and 2020. The note bears interest at a rate of 2.00%.

**Note 9: Payment-in-Lieu of Taxes (PILOT) and Administrative Service Fees**

The Water and Sewer Funds are exempt from federal and state income taxes and local property taxes because they are enterprise funds of the City of Kansas City, Missouri. However the Funds are required by a City Ordinance to pay a percentage of gross operating revenues to the General Fund of the City of Kansas City, Missouri. The payment-in-lieu of tax was established at 1.0% of residential and commercial revenue, effective as of May 1, 2016, and increased to 1.5% as of May 1, 2017. The amount transferred for the PILOT management does not consider to be commensurate with the services received, as such, management has classified this as a transfer on the statement of revenues, expenses and changes in net position.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

In addition to these PILOT payments, the Water and Sewer Funds make payments to the General Fund of the City for office space and certain administrative, data processing and accounting services. For the years ended April 30, 2018 and 2017, total payments for administrative and general expenses and transfers for PILOT's are as follows:

	<b>2018</b>	<b>2017</b>
Water Fund		
Administrative, data processing and accounting	\$ 5,440,070	\$ 5,498,379
Overhead allocation for self-insured claims	6,164,455	5,595,145
PILOT	1,893,742	1,372,416
Sewer Fund		
Administrative, data processing and accounting	5,592,944	5,272,354
Overhead allocation for self-insured claims	2,682,158	1,522,034
PILOT	2,502,435	1,588,818
	<u>\$ 24,275,804</u>	<u>\$ 20,849,146</u>

The Water Fund provides billing and collection services for the City of Kansas City, Missouri Sewer Fund and charged the City of Kansas City, Missouri Sewer Fund \$4,522,070 and \$5,106,255 for these services for the years ended April 30, 2018 and 2017, respectively.

**Note 10: Employees' Retirement System**

The City sponsors a contributory, single-employer defined benefit pension plan, the Employees' Retirement System (the Plan), covering substantially all employees of the Department. However, for purposes of the Department's financial statements, the City has allocated the pension related items and the Department has disclosed the Plan as a cost-sharing multiple employer defined benefit pension plan in accordance with the requirements of GASB statement No. 68.

The Board of Trustees of the Employees' Retirement System of the City of Kansas City, Missouri (the Board) administers the Plan.

The Plan was established in the code of ordinances under Part II, Chapter II, Article IX, Division 2, Section 2-1172 which states, "All full-time, permanent employees in the classified and unclassified services shall become members of the retirement system as a condition of employment, including all full-time, permanent former Metropolitan Ambulance Service Trust (MAST) employees who became city employees as of April 25, 2010, and who did not become members of the Firefighters' Pension System. Former MAST employees have the option within 60 days of the passage of this ordinance to elect to become members of this plan in lieu of participation in the defined contribution plan set out in Division 10. Also included in membership are those who have retired in circumstances establishing eligibility for an annuity in this pension system and inactive members on leave of absence."

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

The Board of Trustees of the Plan shall consist of ten members, including the Director of Human Resources and Director of Finance, and seven shall be appointed by the Mayor as follows:

- a. One shall be a retired member of the system.
- b. Four, other than the forgoing, shall be recognized business and/or civic leaders with financial backgrounds, such as investments, management of employees' benefit plans, who are not employees of the City. At the Mayor's option, one of this group may be a City Council person with a financial background who shall serve as an ex-officio member of the Board with a right to vote.
- c. Two shall be active employees and members of the retirement system as recommended by the union.
- d. In the event that Local 42, IAFF, has 200 or more members, including retirees, participating in the Employees' Retirement System, Local 42 will have one designated member who will be vested with the same voting rights as the other trustees.

The Board is responsible for establishing or amending plan provisions. The Board issues publicly available financial reports that include financial statements and required supplementary information. The financial reports may be obtained by writing to:

**Employees' Pension Systems**

The Retirement Division  
City Hall-10th Floor  
414 East 12th Street  
Kansas City, Missouri 64106  
Phone 816.513.1928

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Retirement Benefits***

Benefit terms for the Plan are established in the City administrative code and can only be amended by the City Council. The Plan provides retirement benefits as well as pre-retirement death benefits as noted below:

**Tier I Members**

The Plan provides retirement benefits for those employees hired before April 20, 2014 (Tier I Members). Employees become vested for retirement benefits after five years of service. Members who retire with total age and creditable service equal to 80, or the later of age 60 and 10 years of creditable service, are entitled to an annual pension based on a percentage of final average compensation multiplied by years and months of creditable service. If married at the time of retirement, the percentage is 2.0% for general employees and 2.2% for elected officials, and if unmarried at the date of retirement, the percentage is 2.2% up to a maximum of 70% of final average compensation as defined in the Plan. If the employee has at least 10 years of creditable service, the minimum benefit is \$400 per month.

If members terminate prior to retirement and before rendering five years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. Such refunds result in the forfeiture of all other benefits under the Plan. Members terminating prior to retirement with five or more years of service may elect to receive a refund of their member contributions with interest as a lump-sum distribution, or they may elect to receive a deferred pension. An automatic annual cost-of-living adjustment of 3%, non-compounded, is provided annually.

**Tier II Members**

The Plan provides retirement benefits for those employees hired on or after April 20, 2014 (Tier II Members). Employees become vested for retirement benefits after ten years of service. Members who retire with total age and creditable service equal to 85, or the later of age 62 and 10 years of creditable service, are entitled to an annual pension of 1.75% of final average compensation multiplied by the number of years of creditable service, subject to a maximum limit of 70% of final average compensation as defined in the Plan.

If employees terminate prior to retirement and before rendering ten years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. An annual cost-of-living adjustment, not to exceed 2.5%, non-compounded, per year is provided to pensioners age 62 and older if the prior year funding ratio is equal to or greater than 80% and will be equal to the percentage increase in the prior 12 months of the final national Consumer Price Index.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Death Benefits***

If a retired member dies, the following benefits shall be paid:

To the member's spouse until death, a retirement benefit equal to one-half of the member's normal retirement benefit. To the member's designated beneficiary or estate, if there is no surviving spouse, any remaining member contributions and interest. If an active member dies, the member contributions and interest are distributed to the surviving spouse or, if none, to the designated beneficiary. The surviving spouse, however, may elect to receive monthly benefit payments instead of the lump-sum distribution if the member had five or more years of creditable service.

***Contributions***

Funding is provided by contributions from Plan members, the Fund and earnings on investments. Members contribute 5% of their base salary. The Water and Sewer Funds' contributions are set by the City Council in conjunction with its approval of the annual budget, based on the actuarially determined contribution rate set by the Plan's consulting actuary. For the years beginning May 1, 2017 and 2016, both the Water and Sewer Funds contributed 15.40% and 13.81% of payroll, respectively, which is the actuarially determined Board contribution rates for the respective years. Future Fund contributions will be determined through each Fund's budgeting process.

The Department's governing body has the authority to establish and amend the contribution requirements of each major fund and active employees. The governing body establishes rates based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The Water and Sewer Funds are required to contribute the difference between the actuarially determined rate and the contribution rate of employees. For the years ended April 30, 2018 and 2017, employees within the Water Fund contributed \$1,132,025 and \$998,950, respectively, and the Water Fund contributed \$3,187,297 and \$2,972,461, respectively, to the Plan. For the years ended April 30, 2018 and 2017, employees within the Sewer Fund contributed \$966,801 and \$842,814, respectively, and the Sewer Fund contributed \$2,722,121 and \$2,508,453, respectively, to the Plan.

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

At April 30, 2018 and 2017, the Water Fund reported a liability of \$29,029,374 and \$30,723,968, respectively, for its proportionate share of the net pension liability. At April 30, 2018 and 2017, the Sewer Fund reported a liability of \$24,792,427 and \$25,927,891, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of April 30, 2017 and 2016, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of April 30, 2016 and 2015 rolled forward one year to the measurement dates. The Water and Sewer Funds' proportion of the net pension liability was based on the respective Fund's actual contributions to the pension plan for the

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

years ended April 30, 2017 and 2016. At April 30, 2018 and 2017, the Water Fund's proportion was 13.07% and 12.54%, respectively. At April 30, 2018 and 2017, the Sewer Fund's proportion was 11.16% and 10.58%, respectively.

For the years ended April 30, 2018 and 2017, the Water Fund recognized pension expense of \$6,800,374 and \$5,193,216, respectively. For the years ended April 30, 2018 and 2017, the Sewer Fund recognized pension expense of \$5,807,834 and \$4,159,127, respectively.

At April 30, 2018 and 2017, KC Water reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<b>2018</b>		<b>2017</b>	
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
<b>Water Fund</b>				
Net difference between projected and actual earnings on pension plan investments	\$ 4,767,051	\$ -	\$ 10,021,742	\$ -
Changes in assumptions	3,376,343	-	4,320,508	-
Differences between expected and actual experience	-	521,618	-	609,750
Changes in Fund proportion	1,289,130	-	-	-
Fund contributions made subsequent to the measurement date of the net pension liability	3,187,297	-	2,972,461	-
	<u>12,619,821</u>	<u>521,618</u>	<u>17,314,711</u>	<u>609,750</u>
<b>Sewer Fund</b>				
Net difference between projected and actual earnings on pension plan investments	4,071,282	-	8,457,326	-
Changes in assumptions	2,883,552	-	3,646,068	-
Differences between expected and actual experience	-	445,486	-	514,569
Changes in Fund proportion	1,412,785	-	-	-
Fund contributions made subsequent to the measurement date of the net pension liability	2,722,121	-	2,508,453	-
	<u>11,089,740</u>	<u>445,486</u>	<u>14,611,847</u>	<u>514,569</u>
<b>Total Department</b>	<u>\$ 23,709,561</u>	<u>\$ 967,104</u>	<u>\$ 31,926,558</u>	<u>\$ 1,124,319</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

At April 30, 2018 and 2017, the Water Fund reported \$3,187,297 and \$2,972,461, respectively, and the Sewer Fund reported \$2,722,121 and \$2,508,453, respectively, of deferred outflows of resources resulting from contributions subsequent to the measurement date that will be recognized as a reduction of the net pension liability in the next fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources at April 30, 2018, related to pensions, will be recognized in pension expense as follows:

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
2019	\$ 3,085,285	\$ 2,721,347	\$ 5,806,632
2020	3,085,285	2,721,346	5,806,631
2021	3,314,253	2,916,896	6,231,149
2022	(573,917)	(437,456)	(1,011,373)
	<u>\$ 8,910,906</u>	<u>\$ 7,922,133</u>	<u>\$ 16,833,039</u>

**Actuarial Assumptions**

The total pension liability in the May 1, 2016 and 2015 actuarial valuations was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.0%
Salary increases	Ranges from 4.0% to 8.0%
Ad hoc cost-of-living adjustments	3.0%, simple for Tier I, 2.5% for Tier II
Investment rate of return	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Annuitant Mortality Table, projected using a modified scale, MP-2015 on a generational basis for healthy individuals and the RP-2000 Combined Disability Mortality Table projected using a modified scale MP-2015 on a generational basis for disabled individuals.

The actuarial assumptions used in the May 1, 2016 and 2015 valuations were based on the results of an actuarial experience study for the period 2006 – 2010 and showed that there were sufficient margins in the rates to provide for potential future improvements in mortality.

The investment return assumption of 7.50% was selected based upon an analysis that included (a) capital market assumptions provided by the investment consultant, (b) the asset allocation of the fund and (c) investment return assumptions of other public retirement systems.

The inflation assumption of 3.0% was selected based upon an analysis that included (a) input from the investment consultant, (b) historical inflation as measured by Consumer Price Index and (c) implied inflation in long-term government bonds.

The long-term wage growth assumption of 4.0% was based upon the inflation assumption of 3.0% plus a real growth wage assumption of 1.0% which was derived from an analysis of historical increases in Social Security Average earnings.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Long-Term Expected Real Rate of Return***

Best-estimates arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of April 30, 2018 are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-term Expected Real Rate of Return</b>
Large Cap Equity	16.0%	3.8%
Small Cap Equity	5.5%	4.3%
Non-US Equity	7.0%	5.3%
Global Equity	19.0%	4.7%
Emerging Markets Equity	3.0%	7.3%
Opportunistic Equity	12.0%	3.8%
Fixed Income	26.5%	0.1%
Real Assets	10.0%	4.0%
Cash	1.0%	-0.5%

***Discount Rate***

The discount rate used to measure the total pension liability was 7.50%, which is the assumed long-term expected rate of return in Plan investments. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that Fund contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate. Based on those assumptions, the pension plan's fiduciary net position will be greater than or equal to the benefit payments projected for each future period. Therefore, the long-term expected rates of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Sensitivity of the Water and Sewer Fund's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate***

The net pension liability of the Water and Sewer Funds have been calculated using a discount rate of 7.50%. The following presents the net pension liability using a discount rate 1% higher and 1% lower than the current rate:

	<b>1% Decrease</b>	<b>Current Discount Rate</b>	<b>1% Increase</b>
<b>2018</b>			
Water Fund's net pension liability	\$ 49,784,297	\$ 29,029,374	\$ 11,646,675
Sewer Fund's net pension liability	42,517,960	24,792,427	9,946,768
Total Department	<u>\$ 92,302,257</u>	<u>\$ 53,821,801</u>	<u>\$ 21,593,443</u>

***Pension Plan Fiduciary Net Position***

Detailed information about the pension plan's fiduciary net position is available in the separately issued Plan financial report, located at [www.kcmo.org](http://www.kcmo.org).

***Payable to the Pension Plan***

At April 30, 2018 and 2017, the Water Fund reported a payable of \$143,000 and \$158,000, respectively, for the outstanding amount of contributions to the pension plan. At April 30, 2018 and 2017, the Sewer Fund reported a payable of \$122,000 and \$133,000, respectively, for the outstanding amount of contributions to the pension plan.

**Note 11: Other Postemployment Benefits**

In accordance with Governmental Accounting Standards Board (GASB) Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (GASB 45), other postemployment benefits (OPEB) are recorded in the financial statements as noncurrent liabilities on the statements of net position and are included as an operating expense in salaries and wages and employee benefits on the statements of revenues, expenses and changes in net position.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

***Plan Description***

The City sponsors a single-employer, defined benefit health care plan that provides health care benefits to retirees and their dependents, including medical, dental and vision coverage. The City requires the retirees to pay 100% of the same medical premium charged to active participants. The rates being paid by retirees for benefits are typically lower than those for individual health insurance policies. The difference between these amounts is the implicit rate subsidy, which is considered OPEB under GASB 45.

Retirees and spouses have the same benefits as active employees. Retiree coverage terminates either when the retiree becomes covered under another employer health plan or when the retiree reaches Medicare eligibility age, which is currently age 65. Spousal coverage is available until the retiree becomes covered under another employer health plan, attains Medicare eligibility age or dies.

The net OPEB obligation at April 30, 2018 is as follows:

	<b>City</b>	<b>Water</b>	<b>Sewer</b>
Annual required contribution (ARC)	\$ 8,912,701	\$ 659,396	\$ 576,244
Interest on net OPEB obligation	3,248,508	244,701	206,647
Adjustment to annual required contribution	(4,334,977)	(326,541)	(275,760)
Annual OPEB cost (expense)	7,826,232	577,556	507,131
Contributions made (employer)	(7,463,023)	(552,144)	(482,516)
Change in net OPEB obligation	363,209	25,412	24,615
Net OPEB obligation, April 30, 2017	72,189,070	5,437,790	4,592,152
Net OPEB obligation, April 30, 2018	<u>\$ 72,552,279</u>	<u>\$ 5,463,202</u>	<u>\$ 4,616,767</u>

***Funded Status and Funding Progress***

As of May 1, 2016, the most recent actuarial valuation date, the OPEB plan was 0.0% funded. The actuarial accrued liability for benefits was \$89.1 million, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$89.1 million. The covered payroll (annual payroll of active employees covered by the OPEB plan) was \$226.1 million, and the ratio of UAAL to the covered payroll was 39.4%.

Although determinations of the actuarial status were not made for individual funds, the City has allocated its 2018 and 2017 overall net OPEB obligation of approximately \$72,600,000 and \$72,189,000, respectively, to each participating fund. For the years ended April 30, 2018 and 2017, the Water Fund's allocation was approximately \$5,463,000 and \$5,438,000, respectively, and the Sewer Fund's allocation was approximately \$4,616,000 and \$4,592,000, respectively.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the health care cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress is presented as required supplementary information following the notes to the financial statements and presents multi-year trend information over time relative to the actuarial accrued liabilities for benefits.

***Actuarial Methods and Assumptions***

Projections of benefits for financial reporting are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the May 1, 2016 actuarial valuation, the individual entry age actuarial cost method was used. The actuarial assumptions included a 4.5% investment rate of return (net of administrative expenses), which is a blended rate of the expected long-term investment returns on plan assets (of which there are none) and on the employer's own investments calculated based on the funded level of the plan at the valuation date and an annual healthcare cost trend rate of 8.5 - 7.5% annually, reduced by decrements to an ultimate rate of 4.5% after nine years. The actuarial value of assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five year period. The UAAL is being amortized as a 20-year level percentage of pay. The remaining amortization period at April 30, 2018 was 30 years.

**Note 12: Commitments**

At April 30, 2018 and 2017, the City had made purchase commitments primarily for additions to utility lines and improvements on behalf of the Water Fund of approximately \$55,863,000 and \$35,001,000, respectively. These commitments will be funded by a combination of existing resources and future debt issuances.

At April 30, 2018 and 2017, the City had made purchase commitments, primarily for additions to plant on behalf of the Sewer Fund of approximately \$171,478,000 and \$125,991,000, respectively. These commitments will be funded by a combination of existing resources and future debt issuances.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

In January 2018, the Sewer Fund entered into a forward delivery bond purchase agreement for the Series 2018B with an expected delivery date in October 2018. The 2018B Series Sewer System Refunding Revenue Bonds (2018B Series) will have a par value of \$42,055,000, maturity dates ranging from 2020 to 2034 and an average expected interest rate of 5%. The contract was entered into by the Sewer Fund and an underwriter to purchase the 2018B Series on the delivery date for the purpose of effecting a refunding of an outstanding issue that cannot be advance refunded.

**Note 13: Risk Management**

KC Water 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 Department is self-insured for workers' compensation and general liability exposures and participates in the City's self-insurance programs. The City has purchased insurance to limit the exposure to \$1,000,000 on workers' compensation claims per occurrence occurring prior to fiscal year 1997, \$500,000 exposure for all claims originating in fiscal year 1997, \$400,000 exposure for all claims originating in fiscal year 1998, \$2,000,000 exposure for all claims originating in fiscal years 2003 through 2007, \$1,000,000 exposure for all claims originating in fiscal years 2008 through 2011, and \$2,000,000 for all claims originating thereafter. The City also purchases an excess liability policy to cover torts, which are not barred by sovereign immunity. The policy has a \$5,400,000 retention and a \$10,000,000 loss limit. Current sovereign tort immunity statutes and law limit general liability and automobile claim exposure to a maximum of \$420,606 per person and \$2,804,046 per occurrence. Settled claims have not exceeded the self-insured retention in any of the past three fiscal years.

The City also maintains commercial insurance coverage for those areas not covered by the City's self-insurance programs, such as excess general liability, property, cyber and auto. Settled claims have not exceeded commercial insurance coverage for the past three years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

All funds of the City participate in the program and make payments based on estimates of the amounts needed to pay prior and current year claims. The claims liability for the Water and Sewer Funds includes an estimate of claims incurred but not reported (IBNR), which was determined based upon historical claims experience. Activity in the Water and Sewer Fund's claims liability for the years ended April 30, 2018, 2017 and 2016 is summarized as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Water</b>			
Balance, beginning of the year	\$ 16,663,646	\$ 11,068,501	\$ 10,470,580
Current year claims incurred and changes in estimates for claims incurred in prior years	9,052,990	9,664,009	3,131,746
Claims and expenses paid	<u>(7,115,923)</u>	<u>(4,068,864)</u>	<u>(2,533,825)</u>
Balance, end of the year	18,600,713	16,663,646	11,068,501
Less current portion	<u>(4,189,080)</u>	<u>(4,158,719)</u>	<u>(2,893,181)</u>
Noncurrent portion	<u><u>\$ 14,411,633</u></u>	<u><u>\$ 12,504,927</u></u>	<u><u>\$ 8,175,320</u></u>
<b>Sewer</b>			
Balance, beginning of the year	\$ 7,348,785	\$ 5,772,528	\$ 5,572,358
Current year claims incurred and changes in estimates for claims incurred in prior years	5,263,103	3,648,323	2,530,842
Claims and expenses paid	<u>(4,886,554)</u>	<u>(2,072,066)</u>	<u>(2,330,672)</u>
Balance, end of the year	7,725,334	7,348,785	5,772,528
Less current portion	<u>(1,762,357)</u>	<u>(1,900,183)</u>	<u>(1,544,973)</u>
Noncurrent portion	<u><u>\$ 5,962,977</u></u>	<u><u>\$ 5,448,602</u></u>	<u><u>\$ 4,227,555</u></u>

**Note 14: Disclosures About Fair Value of Assets**

KC Water categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. 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; and Level 3 inputs are significant unobservable inputs.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

The City has the following recurring fair value measurements as of April 30, 2018 and 2017:

- U.S. Treasury Bills, U.S. Treasury Notes/Bonds and Federal agencies of approximately \$1,331,620,000 and \$1,163,784,000 as of April 30, 2018 and 2017, respectively, are valued using quoted prices for similar assets, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets (Level 2) inputs.

**Note 15: Net Position**

Net investment in capital assets is comprised of the following:

	<b>April 30, 2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Capital Related Assets			
Land	\$ 4,902,914	\$ 13,880,395	\$ 18,783,309
Construction in progress	23,750,566	46,411,414	70,161,980
Buildings	183,061,164	-	183,061,164
Treatment plant and other facilities	-	339,497,071	339,497,071
Utility line and improvements	912,195,201	1,069,971,069	1,982,166,270
Land improvements	-	9,929,089	9,929,089
Green infrastructure	-	8,671,373	8,671,373
Machinery and equipment	99,000,740	158,473,765	257,474,505
	<u>1,222,910,585</u>	<u>1,646,834,176</u>	<u>2,869,744,761</u>
Less accumulated depreciation	<u>(226,717,429)</u>	<u>(401,931,387)</u>	<u>(628,648,816)</u>
Capital assets, net	<u>996,193,156</u>	<u>1,244,902,789</u>	<u>2,241,095,945</u>
Deferred outflows of resources - loss on refunding	<u>1,969,672</u>	<u>1,136,750</u>	<u>3,106,422</u>
Less Related Liabilities			
Current portion, bonds and capital leases payable	19,625,000	25,236,300	44,861,300
Bonds and notes payable, net of premium, discount and unspent proceeds	328,497,088	360,276,132	688,773,220
Contracts and retainages payable	2,576,333	5,349,210	7,925,543
Total capital related liabilities	<u>350,698,421</u>	<u>390,861,642</u>	<u>741,560,063</u>
Net investment in capital assets	<u>\$ 647,464,407</u>	<u>\$ 855,177,897</u>	<u>\$1,502,642,304</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Capital Related Assets			
Land	\$ 4,178,312	\$ 13,401,078	\$ 17,579,390
Construction in progress	38,215,233	110,498,840	148,714,073
Buildings	178,150,081	-	178,150,081
Treatment plant and other facilities	-	339,584,763	339,584,763
Utility line and improvements	845,509,347	962,542,618	1,808,051,965
Machinery and equipment	99,023,157	126,592,273	225,615,430
	<u>1,165,076,130</u>	<u>1,552,619,572</u>	<u>2,717,695,702</u>
Less accumulated depreciation	<u>(215,727,578)</u>	<u>(395,336,831)</u>	<u>(611,064,409)</u>
Capital assets, net	<u>949,348,552</u>	<u>1,157,282,741</u>	<u>2,106,631,293</u>
Deferred outflows of resources - loss on refunding	<u>2,390,817</u>	<u>1,284,265</u>	<u>3,675,082</u>
Less Related Liabilities			
Current portion, bonds and capital leases payable	19,610,000	19,961,818	39,571,818
Bonds and notes payable, net of premium, discount and unspent proceeds	315,354,209	322,284,127	637,638,336
Contracts and retainages payable	2,551,423	4,693,139	7,244,562
Total capital related liabilities	<u>337,515,632</u>	<u>346,939,084</u>	<u>684,454,716</u>
Net investment in capital assets	<u>\$ 614,223,737</u>	<u>\$ 811,627,922</u>	<u>\$1,425,851,659</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

Restricted net position at April 30, 2018 and 2017 is as follows:

	<b>April 30, 2018</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Restricted Assets			
Cash and cash equivalents	\$ 14,206,586	\$ 10,896,830	\$ 25,103,416
Investments	107,211,728	269,948,116	377,159,844
Interest receivable	650,398	1,201,013	1,851,411
	<u>122,068,712</u>	<u>282,045,959</u>	<u>404,114,671</u>
Less Liabilities from Restricted Assets			
Debt related to unspent bond proceeds	73,245,840	217,952,779	291,198,619
Accrued interest and fiscal agent fees	6,935,528	7,201,254	14,136,782
Customer deposits	<u>3,053,522</u>	<u>-</u>	<u>3,053,522</u>
	<u>83,234,890</u>	<u>225,154,033</u>	<u>308,388,923</u>
Restricted Net Position	<u>\$ 38,833,822</u>	<u>\$ 56,891,926</u>	<u>\$ 95,725,748</u>
	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Restricted Assets			
Cash and cash equivalents	\$ 8,263,340	\$ 7,703,553	\$ 15,966,893
Investments	146,092,717	154,571,331	300,664,048
Interest receivable	373,423	410,172	783,595
	<u>154,729,480</u>	<u>162,685,056</u>	<u>317,414,536</u>
Less Liabilities from Restricted Assets			
Debt related to unspent bond proceeds	107,407,409	101,559,662	208,967,071
Accrued interest and fiscal agent fees	6,576,120	5,719,527	12,295,647
Customer deposits	<u>2,485,195</u>	<u>-</u>	<u>2,485,195</u>
	<u>116,468,724</u>	<u>107,279,189</u>	<u>223,747,913</u>
Restricted Net Position	<u>\$ 38,260,756</u>	<u>\$ 55,405,867</u>	<u>\$ 93,666,623</u>



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Note 16: City Sewer Overflow Control Plan**

The City submitted a plan to control overflows from the City's combined and separate sanitary sewer systems to the United States Environmental Protection Agency (the EPA) and the Missouri Department of Natural Resources (the MDNR). The control plan is being driven by requirements of the *Clean Water Act* and by policies of the EPA. The City has reached an agreement with the federal government, in the form of a consent decree that includes a sewer overflow control plan, resolution of past *Clean Water Act* violations and the imposition of a penalty. The Consent Decree was lodged on May 18, 2010, and the court issued an order approving and entering the Consent Decree. A separate agreement has been reached with the state, resolving past sewer overflow violations, imposing a penalty and developing a sewer overflow response plan. The City has been timely fulfilling its obligations under this settlement.

The current estimated capital costs of this control plan are \$4.5 billion with estimated inflation at the end of the 25-year timeframe. In addition, there will be a substantial increase in annual expenditures for operation and maintenance. It is anticipated that this plan will be funded primarily from the City's Sewer Fund, which is separate from the General Fund. The City does not anticipate that the City's General Fund will be relied upon to assist in the financing of the control plan; however, further future analysis will be required. Specifically, upon approval and implementation of the control plan, specific financing strategies to offset the cost of the control plan will be evaluated and implemented, which could include appropriation of moneys from the City's General Fund. In November of 2016, Water Services and its Overflow Control Program team submitted a request for a second medication that extended the completion date for six particular projects in order to better sequence construction, capitalize on the timing of other municipal infrastructure projects and to optimize the scope of particular projects to achieve greater public benefits. The EPA approved these modifications in November of 2017.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2018 and 2017**

**Note 17: Restatement of Prior-Year Financial Statements**

Fiscal year 2017 has been restated to distinguish between the major categories of restrictions on net position. The following financial statement line items for the fiscal year 2017 were affected by the correction:

	<b>As Restated</b>	<b>As Previously Reported</b>	<b>Effects of Change</b>
Net Position - Water			
Restricted - expandable	\$ -	\$ 38,260,756	\$(38,260,756)
Restricted - capital projects	23,797,302	-	23,797,302
Restricted - debt service	14,463,454	-	14,463,454
Net Position - Sewer			
Restricted - expandable	-	55,405,867	(55,405,867)
Restricted - capital projects	41,025,858	-	41,025,858
Restricted - debt service	14,380,009	-	14,380,009
Net Position - Total			
Restricted - expandable	-	93,666,623	(93,666,623)
Restricted - capital projects	64,823,160	-	64,823,160
Restricted - debt service	28,843,463	-	28,843,463

**Note 18: Subsequent Events**

***Debt***

On October 4, 2018, the City issued its Sanitary Sewer System Refunding Revenue Bonds, Series 2018B ("Series 2018B Bonds") in the amount of \$42,055,000. The Series 2018B Bonds financed the refunding of the \$53,105,000 of outstanding Sanitary Sewer System Revenue Bonds, Series 2009A, which will be redeemed on January 1, 2019. The City entered into a forward delivery bond purchase agreement, on January 31, 2018, related to the Series 2018B Bonds.



# FINANCIAL SECTION

*Required Supplementary Information (Unaudited)*

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Department's Proportionate Share of the Net Pension Liability**  
**Employees' Retirement System of the City of Kansas City, Missouri**  
**Last Ten Fiscal Years**

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Water Fund's proportion of the net pension liability	13.07%	12.54%	12.54%
Water Fund's proportionate share of the net pension liability	\$ 29,029,374	\$ 30,723,968	\$13,380,125
Water Fund's covered payroll	\$ 21,467,220	\$ 20,923,378	\$21,020,683
Water Fund's proportionate share of the net pension liability as a percentage of its covered payroll	135.23%	146.84%	63.65%
Plan fiduciary net position as a percentage of the total pension liability	83.10%	80.69%	91.05%
	<b>2018</b>	<b>2017</b>	<b>2016</b>
Sewer Fund's proportion of the net pension liability	11.16%	10.58%	10.58%
Sewer Fund's proportionate share of the net pension liability	\$ 24,792,427	\$ 25,927,891	\$11,291,459
Sewer Fund's covered payroll	\$ 18,330,082	\$ 17,653,058	\$17,739,310
Sewer Fund's proportionate share of the net pension liability as a percentage of its covered payroll	135.26%	146.87%	63.65%
Plan fiduciary net position as a percentage of the total pension liability	83.10%	80.69%	91.05%

**Note to Schedule:** This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

This information is presented as of the measurement date for each fiscal year, which is April 30 of the prior year.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Department's Contributions**  
**Employees' Retirement System of the City of Kansas City, Missouri**  
**Last Ten Fiscal Years**

<b>Water</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Water Fund's contractually required contribution	\$ 3,187,882	\$ 2,889,519	\$ 3,077,428
Contributions in relation to the contractually required contribution	<u>3,206,129</u>	<u>2,972,461</u>	<u>3,082,377</u>
Contribution deficiency (excess)	<u>\$ (18,247)</u>	<u>\$ (82,942)</u>	<u>\$ (4,949)</u>
Water Fund's covered payroll	\$ 21,932,901	\$ 20,596,705	\$20,923,378
Contributions as a percentage of covered payroll	14.62%	14.44%	14.73%
<b>Sewer</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Sewer Fund's contractually required contribution	\$ 2,722,017	\$ 2,437,887	\$ 2,596,426
Contributions in relation to the contractually required contribution	<u>2,737,598</u>	<u>2,508,453</u>	<u>2,601,211</u>
Contribution deficiency (excess)	<u>\$ (15,581)</u>	<u>\$ (70,566)</u>	<u>\$ (4,785)</u>
Sewer Fund's covered payroll	\$ 18,727,711	\$ 17,377,443	\$17,653,058
Contributions as a percentage of covered payroll	14.62%	14.44%	14.73%

**Note to Schedule:** This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

This information is presented as of the Department's most recent fiscal year end.

There are no significant changes to benefit assumptions and/or actuarial methods.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Funding Progress**  
**Year Ended April 30, 2018**  
*(In thousands)*

Other Postemployment Benefits						
	(a)	(b)	(b-a)	(a/b)	(c)	[(b-a)/c]
	Actuarial	Actuarial	Unfunded		Covered	[(b-a)/c]
Valuation Date	Value of	Liability	AAL	Funded Ratio	Payroll	Percentage
	Assets	(AAL)	(UAAL)			of Covered
		Entry Age				Payroll
City of Kansas City - Employee/Firefighter Other Postemployment Benefits						
5/1/2012	\$ -	\$ 105,013	\$ 105,013	0%	\$ 221,197	47.47%
5/1/2014	-	97,828	97,828	0%	227,039	43.09%
5/1/2016	-	89,146	89,146	0%	226,100	39.43%

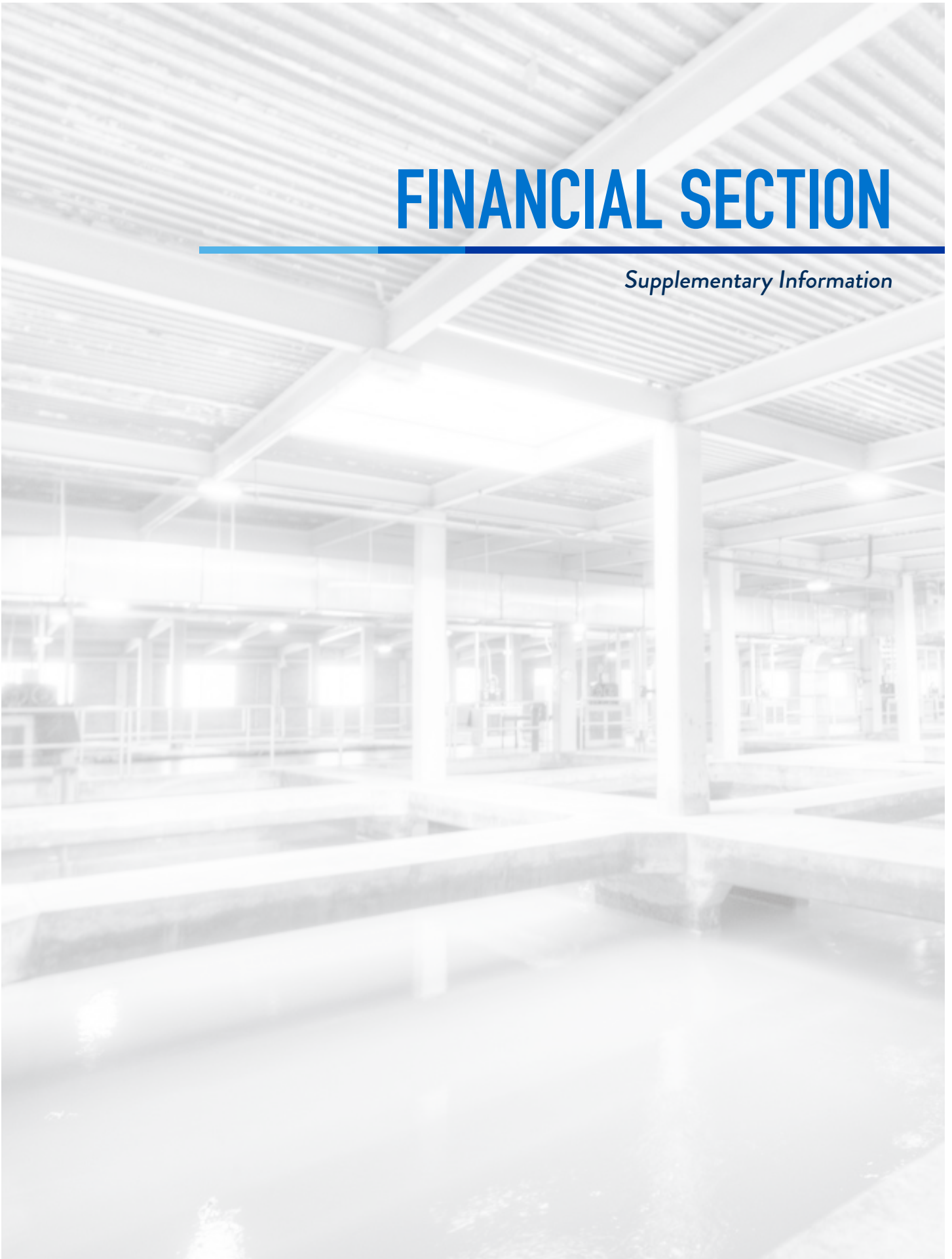
**Note:** Valuation and determinations of the actuarial status were not made for individual funds; as such, the above information is for the entire City OPEB Plan.



# FINANCIAL SECTION

---

*Supplementary Information*



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position –**  
**Sewer Fund**  
**Year Ended April 30, 2018**

	<b>Wastewater</b>	<b>Stormwater</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 172,044,084	\$ 13,434,166	\$ 185,478,250
Intermunicipal sewer charges	33,517,836	-	33,517,836
Other operating revenues	5,652,415	811,387	6,463,802
	<u>211,214,335</u>	<u>14,245,553</u>	<u>225,459,888</u>
<b>Operating Expenses</b>			
Sewerage treatment and pumping	35,605,983	99,701	35,705,684
Sewer maintenance	28,514,416	8,291,096	36,805,512
Industrial and household hazardous waste control	817,506	653,433	1,470,939
Administrative and general	45,569,553	5,336,586	50,906,139
Depreciation and amortization	26,414,535	7,242,278	33,656,813
	<u>136,921,993</u>	<u>21,623,094</u>	<u>158,545,087</u>
<b>Operating Income (Loss)</b>	<u>74,292,342</u>	<u>(7,377,541)</u>	<u>66,914,801</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	1,399,152	56,434	1,455,586
Interest expense and fiscal agent fees	(12,303,244)	(44,740)	(12,347,984)
Other	17,243	12,307	29,550
	<u>(10,886,849)</u>	<u>24,001</u>	<u>(10,862,848)</u>
<b>Excess of Revenues Over (Under) Expenses Before Capital Contributions</b>	63,405,493	(7,353,540)	56,051,953
<b>Capital Contributions</b>	759,456	10,089,575	10,849,031
<b>Payment-in-Lieu of Taxes</b>	<u>(2,502,435)</u>	<u>-</u>	<u>(2,502,435)</u>
<b>Increase in Net Position</b>	<u>\$ 61,662,514</u>	<u>\$ 2,736,035</u>	<u>\$ 64,398,549</u>





# STATISTICAL SECTION

---

*Financial Trends*

*Revenue Capacity*

*Debt Capacity*

*Demographic and Economic Information*

*Operating Information*

## Statistical Section (Unaudited)

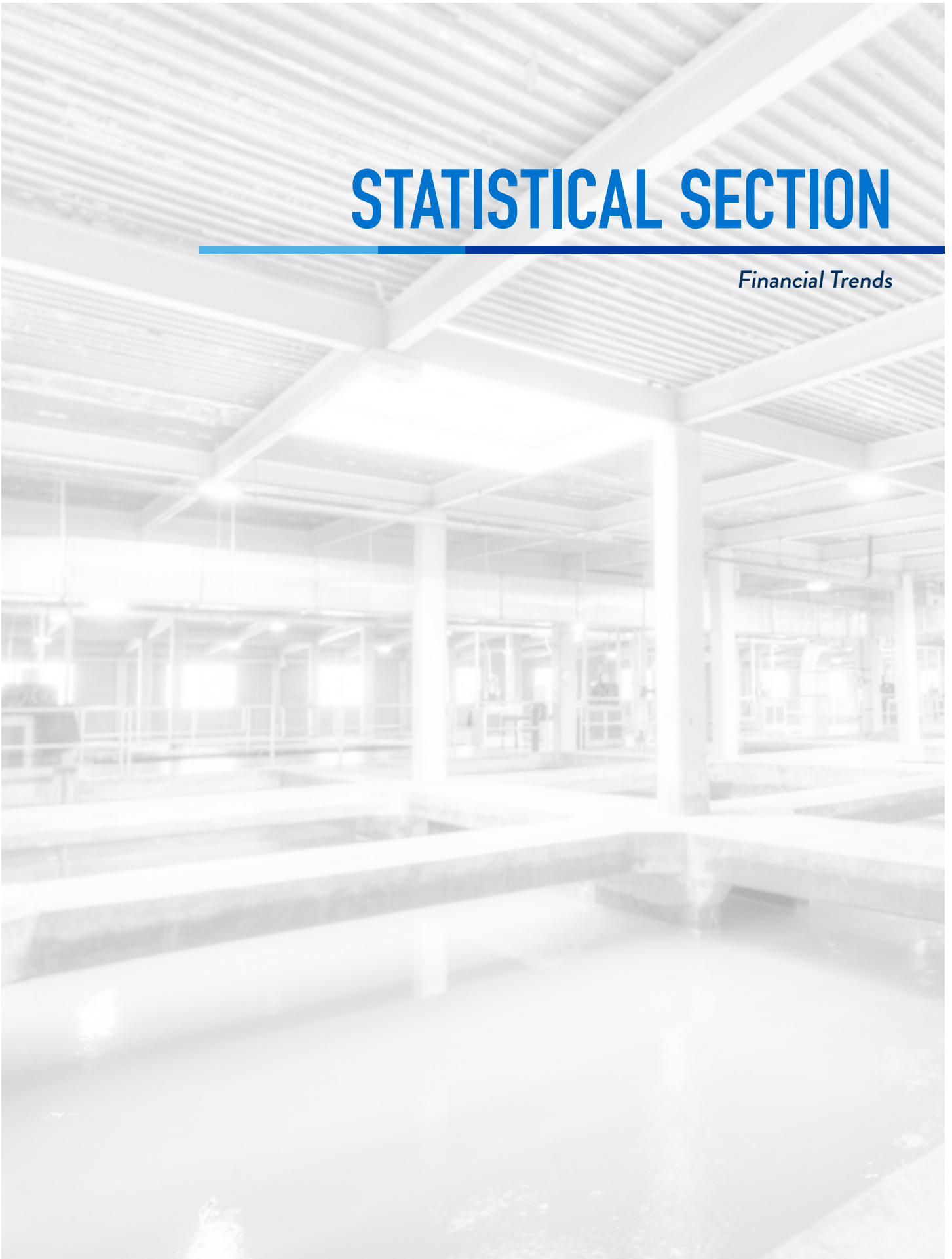
This part of the comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Department's overall financial health.

<i>Contents</i>	<i>Page</i>
<b><u>Financial Trends</u></b>	74
These schedules contain trend information to help the reader understand how the utility's financial performance and well-being have changed over time.	
<b><u>Revenue Capacity</u></b>	77
These schedules contain information to help the reader assess the Department's most significant local revenue source.	
<b><u>Debt Capacity</u></b>	83
These schedules present information to help the reader assess the affordability of the Department's current levels of outstanding debt and the Department's ability to issue additional debt in the future.	
<b><u>Demographic and Economic Information</u></b>	88
These schedules offer demographic and economic indicators to help the reader understand how the information in the utility's financial activities takes place.	
<b><u>Operating Information</u></b>	90
These schedules contain service and infrastructure data to help the readers understand how the information in the utility's financial report relates to the services the utility provides and the activities it performs.	

# STATISTICAL SECTION

---

*Financial Trends*



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Net Position by Category**  
**Last Ten Fiscal Years**

<b>Water Fund</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Net investment in capital assets	\$ 428,340,318	\$ 438,188,214	\$ 455,704,677	\$ 470,155,178	\$ 488,842,664	\$ 513,054,370	\$ 552,399,594	\$ 593,543,635	\$ 614,223,737	\$ 647,464,407
Restricted - expendable	4,887,540	12,703,629	11,382,337	10,008,982	13,199,410	26,454,618	24,439,399	37,103,229	38,260,756	38,833,822
Unrestricted	14,458,602	15,160,220	35,888,149	57,021,378	83,331,615	83,631,558	99,975,615	94,221,747	122,721,652	137,090,444
Total net position	447,686,460	466,052,063	502,975,163	537,185,538	585,373,689	623,140,546	676,814,608	724,868,611	775,206,145	823,388,673
<b>Sewer Fund</b>										
Net investment in capital assets	563,947,955	591,072,327	608,273,541	629,443,591	651,557,999	693,704,508	733,946,847	760,587,456	811,627,922	855,177,897
Restricted - expendable	7,418,277	7,377,826	7,465,340	7,815,116	11,664,261	22,724,620	31,483,449	55,523,858	55,405,867	56,891,926
Unrestricted	29,211,764	29,102,652	53,640,792	73,415,975	87,048,093	113,228,784	140,969,348	151,260,389	177,299,923	196,662,438
Total net position	600,577,996	627,552,805	669,379,673	710,674,682	750,270,353	829,657,912	906,399,644	967,371,703	1,044,333,712	1,108,732,261
<b>Total Department</b>										
Net investment in capital assets	992,288,273	1,029,260,541	1,063,978,218	1,099,598,769	1,140,400,663	1,206,758,878	1,286,346,441	1,354,131,091	1,425,851,659	1,502,642,304
Restricted - expendable	12,305,817	20,081,455	18,847,677	17,824,098	24,863,671	49,179,238	55,922,848	92,627,087	93,666,623	95,725,748
Unrestricted	43,670,366	44,262,872	89,528,941	130,437,353	170,379,708	196,860,342	240,944,963	245,482,136	300,021,575	333,752,882
Total net position	1,048,264,456	1,093,604,868	1,172,354,836	1,247,860,220	1,335,644,042	1,452,798,458	1,583,214,252	1,692,240,314	1,819,539,857	1,932,120,934

Source: Comprehensive Annual Financial Report for 2017 and 2018 and historical audited financials for remaining years

Note: The Water and Sewer Funds adopted GASB 65 starting in 2013. Previous years have not been restated for the adoption of GASB 65.

Note: The Water and Sewer Funds adopted GASB 68 starting in 2016. Previous years have not been restated for the adoption of GASB 68.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Changes in Net Position - Water Fund**  
**Last Ten Fiscal Years**

	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
<b>Operating Revenues</b>										
Water sales	\$ 79,369,329	\$ 79,402,865	\$ 104,809,250	\$ 113,795,787	\$ 139,044,243	\$ 136,645,032	\$ 141,805,902	\$ 145,387,719	\$ 153,502,388	\$ 156,118,392
Other water revenue	2,401,532	3,051,231	3,043,482	4,425,641	4,128,038	3,132,691	3,363,610	3,638,548	4,995,566	4,011,261
Income from jobbing and contract work and miscellaneous revenues	4,360,006	5,729,988	7,355,893	7,026,768	6,470,794	4,459,597	5,133,697	6,183,139	6,859,793	7,084,210
Total operating revenues	86,130,867	88,184,084	115,208,625	125,248,196	149,643,075	144,237,320	150,303,209	155,209,406	165,357,747	167,213,863
<b>Operating Expenses</b>										
Power and pumping	5,065,124	4,540,886	4,955,130	4,844,668	5,391,806	4,924,274	4,958,291	5,287,722	5,900,861	5,953,828
General and electrical maintenance	2,282,020	2,517,212	2,541,658	4,034,162	4,347,317	4,758,471	4,733,179	4,676,138	6,151,741	6,827,393
Purification	11,078,707	11,549,618	11,892,058	11,020,685	12,245,660	12,159,176	12,141,165	13,081,316	13,185,929	14,156,235
Laboratory services	2,960,532	2,433,467	2,477,521	2,470,682	2,471,376	2,593,992	2,688,627	2,641,992	2,906,656	2,914,501
Transmission and distribution	13,925,182	13,303,041	11,488,867	21,122,053	23,062,262	20,756,589	16,869,006	17,818,781	19,436,953	18,678,483
Customer service	7,156,669	7,040,500	7,295,986	7,236,663	7,851,497	8,229,725	9,122,385	7,768,625	8,263,111	7,087,348
Mechanical maintenance	3,122,413	2,634,981	2,754,732	2,751,426	2,929,851	2,928,413	2,680,090	2,151,887	2,305,651	2,205,877
Customer accounting and collection	4,520,029	4,258,158	4,963,537	5,184,265	5,650,757	9,215,812	10,558,460	6,983,041	6,658,713	7,597,356
Administrative and general	13,423,079	14,477,547	16,123,070	14,585,368	14,748,958	19,056,962	16,352,602	16,090,363	22,639,576	23,460,691
Depreciation and amortization	10,270,730	10,260,837	10,708,385	13,793,442	14,375,320	15,024,352	15,616,130	17,222,379	18,893,810	21,354,867
Total operating expenses	73,804,485	73,016,247	75,200,944	87,043,414	93,074,804	99,647,766	95,719,935	93,722,244	106,343,001	110,236,579
<b>Operating Income</b>	12,326,382	15,167,837	40,007,681	38,204,782	56,568,271	44,589,554	54,583,274	61,487,162	59,014,746	56,977,284
<b>Non-Operating Expenses</b>										
Interest income	1,564,504	2,555,115	1,625,220	1,457,756	977,115	632,555	1,851,862	1,516,951	1,238,646	1,265,617
Interest expense and fiscal agent fees	(6,375,875)	(7,208,735)	(9,103,896)	(9,774,619)	(9,772,564)	(9,586,155)	(11,600,786)	(9,554,013)	(12,005,062)	(12,984,672)
Other	225,141	(7,600)	(214,237)	(192,146)	(472,629)	(7,312)	78,478	(113,555)	(3,961)	53,426
Total nonoperating expenses, net	(4,586,230)	(4,661,220)	(7,692,913)	(8,509,009)	(9,268,078)	(8,960,912)	(9,670,446)	(8,150,617)	(10,770,377)	(11,665,629)
<b>Excess of Revenues Over Expenses Before Capital Contributions</b>	7,740,152	10,506,617	32,314,768	29,695,773	47,300,193	35,628,642	44,912,828	53,336,545	48,244,369	45,311,655
<b>Capital Contributions</b>	3,522,492	7,858,986	4,608,332	4,514,602	2,617,234	2,138,215	8,761,234	3,188,326	3,465,581	4,764,615
<b>Payment-in-lieu of taxes</b>	-	-	-	-	-	-	-	-	(1,372,416)	(1,893,742)
<b>Increase in Net Position</b>	\$ 11,262,644	\$ 18,365,603	\$ 36,923,100	\$ 34,210,375	\$ 49,917,427	\$ 37,766,857	\$ 53,674,062	\$ 56,524,871	\$ 50,337,534	\$ 48,182,528

Source: Comprehensive Annual Financial Report for 2017 and 2018 and historical audited financials for remaining years

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Changes in Net Position - Sewer Fund**  
**Last Ten Fiscal Years**

	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
<b>Operating Revenues</b>										
Retail sewer charges	\$ 48,752,005	\$ 52,411,606	\$ 70,226,412	\$ 76,448,889	\$ 93,951,330	\$ 106,689,690	\$ 119,719,601	\$ 138,557,694	\$ 158,353,571	\$ 172,044,086
Intermunicipal sewer charges	21,098,061	21,707,817	23,123,947	23,925,569	24,508,149	28,047,478	32,700,685	37,242,952	33,687,701	33,517,836
Stormwater fees	9,957,532	11,647,996	10,380,081	11,306,712	12,648,966	12,866,145	12,980,291	13,014,456	12,741,452	13,434,164
Other operating revenues	5,074,154	6,149,271	5,636,666	4,650,554	3,873,393	3,647,080	4,093,029	4,792,703	5,114,883	6,463,802
Total operating revenues	84,881,752	91,916,690	109,367,106	116,331,724	134,981,838	151,250,393	169,493,606	193,607,805	209,897,607	225,459,888
<b>Operating Expenses</b>										
Sewerage treatment and pumping	19,061,496	19,572,886	20,448,799	21,568,513	21,530,125	22,025,549	24,479,377	30,673,879	29,345,704	35,705,684
Sewer maintenance	21,348,055	23,275,663	19,492,673	23,594,922	25,169,485	26,767,154	30,295,934	30,082,417	30,899,733	36,805,512
Administrative and general	17,740,844	18,255,432	17,963,877	17,401,764	22,351,473	23,205,978	27,192,886	32,340,109	39,753,428	50,906,139
Industrial and household hazardous waste control	2,264,239	2,214,016	1,422,844	1,268,901	1,318,222	1,277,181	1,322,689	1,339,268	1,409,208	1,470,939
Depreciation and amortization	16,790,094	18,295,727	21,821,399	22,376,178	22,450,445	23,947,433	26,491,741	28,558,919	30,134,434	33,656,813
Total operating expenses	77,204,728	81,613,724	81,149,592	86,210,278	92,819,750	97,223,295	109,782,627	122,994,592	131,542,507	158,545,087
Operating Income	7,677,024	10,302,966	28,217,514	30,121,446	42,162,088	54,027,098	59,710,979	70,613,213	78,355,100	66,914,801
<b>Non-Operating Revenues (expenses)</b>										
Interest income	1,725,557	3,123,824	2,407,523	2,916,533	1,803,044	1,073,477	2,612,752	2,052,642	2,166,678	1,455,586
Interest expense and fiscal agent fees	(4,404,748)	(4,562,766)	(5,427,078)	(6,077,376)	(6,463,942)	(6,813,348)	(7,760,680)	(10,797,250)	(9,459,096)	(12,347,984)
Other	109,101	12,826	(596,737)	4,389	(722,436)	244,250	(38,763)	(28,187)	(59,551)	29,550
Total non-operating expenses	(2,570,090)	(1,426,116)	(3,616,292)	(3,156,454)	(5,383,334)	(5,495,621)	(5,186,691)	(8,772,795)	(7,351,969)	(10,862,848)
Net income before capital contributions	5,106,934	8,876,850	24,601,222	26,964,992	36,778,754	48,531,477	54,524,288	61,840,418	71,003,131	56,051,953
<b>Capital Contributions</b>	25,598,193	18,097,959	17,225,646	14,330,017	5,693,415	30,856,082	22,217,444	6,716,328	7,547,696	10,849,031
<b>Payment-in-lieu of taxes</b>	-	-	-	-	-	-	-	-	(1,588,818)	(2,502,435)
<b>Increase in Net Position</b>	<u>\$ 30,705,127</u>	<u>\$ 26,974,809</u>	<u>\$ 41,826,868</u>	<u>\$ 41,295,009</u>	<u>\$ 42,472,169</u>	<u>\$ 79,387,559</u>	<u>\$ 76,741,732</u>	<u>\$ 68,556,746</u>	<u>\$ 76,962,009</u>	<u>\$ 64,398,549</u>

Source: Comprehensive Annual Financial Report for 2017 and 2018 and historical audited financials for remaining years

Retail sewer charges and stormwater revenues are combined within the Statement of Revenues, Expenses and Changes in Net Position





# STATISTICAL SECTION

---

*Revenue Capacity*

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Residential Water Service Rates**  
**Last Ten Fiscal Years**

		Water Rates									
		FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
<b>Residential Rates</b>											
<b>Service Charges - Meter size (inches)</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>
5/8	9.00	10.35	11.40	10.85	10.85	11.90	13.09	13.50	13.90	13.90	13.90
3/4	9.50	10.95	12.05	11.70	11.70	12.80	14.08	14.50	14.95	14.95	14.95
1	12.00	13.80	15.20	14.25	14.30	15.65	17.22	17.75	18.30	18.30	18.30
1 1/2	18.00	20.70	22.80	17.70	17.80	19.50	21.45	22.10	22.08	22.08	22.08
2	23.50	27.00	29.70	27.00	27.40	30.00	33.00	34.00	35.00	35.00	35.00
3	50.50	57.50	63.50	86.50	93.50	102.50	112.75	116.00	119.50	119.50	119.50
4	63.00	72.50	80.00	108.50	118.00	129.00	141.90	146.00	150.50	150.50	150.50
6	92.50	106.50	117.00	161.50	176.00	192.00	211.20	217.50	224.00	224.00	224.00
8	142.00	163.00	179.00	246.00	254.00	278.00	305.80	315.00	324.00	324.00	324.00
10	195.00	224.00	246.00	322.00	333.00	365.00	401.50	414.00	426.00	426.00	426.00
12	227.00	261.00	287.00	380.00	393.00	430.00	473.00	487.00	502.00	502.00	502.00
<b>Ordinary Commodity Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
First 600 cubic feet	2.16	2.39	2.70	3.18	3.67	4.02	4.45	4.60	4.60	4.63	4.63
Next 4,400 cubic feet	2.40	2.65	3.00	3.58	4.08	4.50	4.75	4.85	5.09	5.14	5.14
Next 995,000 cubic feet	2.10	2.25	2.45	2.71	3.19	3.65	4.00	4.10	4.29	4.40	4.40
Over 1,000,000 cubic feet	1.51	1.61	1.75	2.04	2.25	2.50	2.75	2.90	3.03	3.05	3.05
<b>Seasonal off-peak commodity charges</b>	1.51	1.61	1.75	2.04	2.34	2.48	2.65	2.80	2.93	2.95	2.95
<b>Fire Protection - Size of Connection</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>
4 inch or less	72.00	76.00	87.00	87.00	91.00	100.00	107.00	110.00	116.00	116.00	116.00
6 inch	177.00	185.00	211.00	217.00	268.00	293.00	315.00	323.00	341.00	341.00	341.00
8 inch	334.00	350.00	399.00	435.00	572.00	625.00	670.00	688.00	726.00	726.00	726.00
10 inch	546.00	572.00	652.00	745.00	1,028.00	1,123.00	1,205.00	1,237.00	1,306.00	1,306.00	1,306.00
12 inch	818.00	857.00	977.00	1,159.00	1,662.00	1,815.00	1,948.00	2,000.00	2,110.00	2,110.00	2,110.00
16 inch	1,545.00	1,618.00	1,845.00	2,326.00	3,541.00	3,868.00	4,150.00	4,261.00	4,496.00	4,496.00	4,496.00

Source: Annual Schedule of Water & Sanitary Sewer Rates, Stormwater fees, Meter Readings, Billing Practices and Bill Payment Guarantees.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Suburban Water Service Rates**  
**Last Ten Fiscal Years**

		Water Rates									
Water Rates		FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
<b><u>Suburban Rate</u></b>											
<b>Service Charges - Meter size (inches)</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>
5/8	10.00	11.50	12.65	12.10	12.10	13.25	14.25	14.70	15.15	15.15	
3/4	10.50	12.10	13.30	13.05	13.05	14.30	15.35	15.80	16.25	16.25	
1	12.50	14.40	15.85	15.95	15.95	17.45	18.75	19.30	19.90	19.90	
1 1/2	18.50	21.30	23.40	19.80	19.80	21.70	23.30	24.00	24.70	24.70	
2	24.00	27.60	30.40	30.40	30.40	33.30	35.80	36.90	38.00	38.00	
3	52.50	60.50	66.50	90.50	96.00	105.00	113.00	116.50	120.00	120.00	
4	66.00	76.00	83.50	114.00	121.50	133.50	143.50	148.00	152.50	152.50	
6	97.00	111.50	122.50	169.50	181.00	198.00	213.00	219.50	226.00	226.00	
8	144.00	166.00	183.00	254.00	260.00	285.00	306.00	315.00	324.00	324.00	
10	201.00	231.00	254.00	348.00	348.00	381.00	410.00	422.00	435.00	435.00	
12	235.00	270.00	297.00	408.00	409.00	448.00	482.00	496.00	511.00	511.00	
<b>Retail Commodity Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
First 600 cubic feet	2.25	2.52	2.84	0.00	-	3.74	-	-	-	-	-
Next 4,400 cubic feet	2.50	2.80	3.15	0.00	-	4.15	-	-	-	-	-
First 5, 000	-	-	-	3.25	3.45	-	4.45	4.90	5.00	5.05	
Over 5,000 cubic feet	2.10	2.25	2.45	2.76	3.07	3.25	3.50	3.90	3.98	4.05	
<b>Wholesale Customers</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
Unrestricted	1.45	1.59	1.67	1.74	1.95	2.00	2.10	2.17	2.26	2.28	
Restricted	1.40	1.54	1.62	1.69	1.89	1.94	2.04	2.10	2.18	2.20	
<b>Repumping Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
1st repumping charge	0.12	0.13	0.15	0.16	0.18	0.18	0.19	0.19	0.20	0.20	
2nd repumping charge	0.23	0.23	0.23	0.23	0.25	0.25	0.26	0.26	0.27	0.27	

Source: Annual Schedule of Water & Sanitary Sewer Rates, Stormwater fees, Meter Readings, Billing Practices and Bill Payment Guarantees.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Sewer and Stormwater Service Rates**  
**Last Ten Fiscal Years**

	Sewer and Stormwater Rates									
	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
<b><u>Residential Rates</u></b>										
<b>Service Charges</b>										
Sanitary sewer - monthly	8.60	8.60	9.90	9.90	11.55	12.20	15.10	17.05	18.05	19.30
Volume charge - per 100 CCF	2.05	2.28	2.62	3.16	3.82	4.54	5.25	6.05	7.18	7.84
Residential accounts	15.38	17.13	19.70	23.70	28.65	34.05	37.00	39.75	41.00	47.04
<b>Commercial and Industrial discharges</b>										
Biochemical oxygen demand (per pound of excess BOD)	0.225	0.225	0.259	0.297	0.297	0.303	0.320	0.320	0.320	0.350
Suspended solids (per pound of excess SS)	0.137	0.137	0.158	0.181	0.181	0.181	0.190	0.190	0.190	0.190
Oil and grease (per pound of excess O&G)	0.085	0.099	0.114	0.131	0.131	0.131	0.140	0.140	0.140	0.140
<b><u>Nonresidential Users</u></b>										
Metered connections - per 100 CCF	1.39	1.55	1.78	2.01	2.01	2.50	2.80	2.92	3.00	3.15
Metered connections directly to treatment plant - per 100 CCF	-	-	-	-	2.13	2.13	-			
Service charges - monthly	8.50	8.60	9.90	9.90	9.90	9.90	11.15	12.40	12.50	11.50
Unmetered connections per 100 CCF	1.98	2.14	2.46	2.79	2.79	3.21	3.55	3.70	3.85	4.53
Unmetered connections - no consumption data	20.25	21.90	25.20	28.55	30.26	34.50	37.00	39.75	41.00	45.00
Customers billed directly by KC Water										
Service charges - monthly	9.69	10.50	12.30	13.50	17.84	17.84	20.50	24.10	25.55	26.20
Volume charges	2.25	2.51	2.94	3.38	5.56	6.35	7.10	8.00	9.35	10.90
<b>High concentration discharges</b>										
Biochemical oxygen demand (per pound of excess BOD)	0.225	0.255	0.293	0.335	0.341	0.382	0.400	0.400	0.400	0.400
Suspended solids (per pound of excess SS)	0.137	0.456	0.790	0.205	0.205	0.205	0.215	0.215	0.215	0.220
Oil and grease (per pound of excess O&G)	0.085	0.101	0.116	0.133	0.133	0.133	0.141	0.141	0.141	0.150
<b><u>Stormwater Rates</u></b>										
Stormwater fee amount	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50	500 sq. ft. 0.50

Source: Annual Schedule of: Water & Sanitary Sewer Service Rates, Stormwater Fees, Meter Readings, Billing Practices and Bill Payment Guarantees

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Revenues Base and Revenues by Customer Class**  
**Last Ten Fiscal Years**

<b>Water Revenues</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Water sales	\$ 67,164,669	\$ 68,196,915	\$ 91,072,250	\$ 97,503,707	\$ 118,403,327	\$ 118,795,707	\$ 124,494,777	\$ 128,315,706	\$ 135,664,964	\$ 136,752,620
Wholesale water sales	12,204,660	11,205,949	13,737,000	16,292,080	20,640,916	17,849,325	17,311,125	17,072,013	17,837,424	19,365,772
Other water revenues	4,360,006	5,729,988	7,355,893	7,026,768	6,470,794	4,459,597	5,133,697	6,183,139	4,995,566	4,011,262
Income from jobbing and contract work and miscellaneous revenues	-	-	-	-	-	-	-	-	-	-
	2,401,532	3,051,231	3,043,482	4,425,641	4,128,038	3,132,691	3,363,610	3,638,548	6,859,793	7,084,205
Total operating revenues	<u>\$ 86,130,867</u>	<u>\$ 88,184,083</u>	<u>\$ 115,208,625</u>	<u>\$ 125,248,196</u>	<u>\$ 149,643,075</u>	<u>\$ 144,237,320</u>	<u>\$ 150,303,209</u>	<u>\$ 155,209,406</u>	<u>\$ 165,357,747</u>	<u>\$ 167,213,859</u>
<b>Water Customer Served (Res. &amp; Comm.)</b>	153,004	158,826	159,000	163,608	167,608	167,912	151,073	170,094	171,094	172,248
<b>Average Revenue Per Customer (Res. &amp; Comm.)</b>	\$ 438.97	\$ 429.38	\$ 572.78	\$ 595.96	\$ 706.43	\$ 707.49	\$ 824.07	\$ 754.38	\$ 792.93	\$ 793.93
<b>Water Consumption (millions of gallons)</b>	36,400	31,359	34,367	38,780	40,945	38,920	31,616	31,336	31,792	31,011
<b>Sewer and Stormwater Revenues</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Retail Sewer Charges	\$ 48,752,005	\$ 52,411,606	\$ 70,226,412	\$ 76,448,889	\$ 93,951,330	\$ 106,689,690	\$ 119,719,601	\$ 138,557,694	\$ 158,353,580	\$ 172,044,093
Intermunicipal sewer charges	21,098,061	21,707,817	23,123,947	23,925,569	24,508,149	28,047,478	32,700,685	37,242,952	33,687,703	33,517,837
Stormwater fees	9,957,532	11,647,996	10,380,081	11,306,712	12,648,966	12,866,145	12,980,291	13,014,456	12,741,452	13,434,164
Other operating revenues	5,074,154	6,149,271	5,636,666	4,650,554	3,873,393	3,647,080	4,093,029	4,792,703	5,114,883	6,463,802
Total operating revenues	<u>84,881,752</u>	<u>91,916,690</u>	<u>109,367,106</u>	<u>116,331,724</u>	<u>134,981,838</u>	<u>151,250,393</u>	<u>169,493,606</u>	<u>193,607,805</u>	<u>209,897,618</u>	<u>225,459,897</u>
Total utility operating revenues	<u>\$ 171,012,619</u>	<u>\$ 180,100,773</u>	<u>\$ 224,575,731</u>	<u>\$ 241,579,920</u>	<u>\$ 284,624,913</u>	<u>\$ 295,487,713</u>	<u>\$ 319,796,815</u>	<u>\$ 348,817,211</u>	<u>\$ 375,255,365</u>	<u>\$ 392,673,756</u>
<b>Sewer Customer Served (Res. &amp; Comm.)</b>	151,649	152,700	153,445	158,482	162,485	163,464	164,060	164,609	165,163	166,267
<b>Average Revenue Per Customer (Res. &amp; Comm.)</b>	\$ 321.48	\$ 343.23	\$ 457.67	\$ 482.38	\$ 578.22	\$ 652.68	\$ 729.73	\$ 841.74	\$ 958.77	\$ 1,034.75
<b>Average daily sewage treatment (millions of gallons)</b>	115	117	117	103	91	72	93	111	96	72

Source: Comprehensive Annual Financial Report for 2018 and historical audited financials for remaining years.

The source for the revenue base and customers served is from the Performance Management division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Largest Users of the System - Water Fund**  
**Last Ten Fiscal Years**

User	Type of Business	FYE 2009		FYE 2010		FYE 2011		FYE 2012		FYE 2013	
		Consumption		Consumption		Consumption		Consumption		Consumption	
		Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)
City of Lee's Summit	Wholesale Water	1	1,392,116	3	754,852	3	903,288	1	1,390,387	1	1,390,387
Jackson County PWSD No. 1	Wholesale Water	2	1,163,850	1	1,105,095	1	1,242,452	2	1,241,662	2	1,241,662
City of Belton	Wholesale Water	3	937,997	2	826,540	2	936,325	3	960,495	3	960,495
City of Raymore	Wholesale Water	4	676,215	4	600,968	4	685,295	5	593,028	5	593,028
City of Blue Springs	Wholesale Water	6	547,796	7	322,358	5	655,340	4	902,400	4	902,400
Raytown Water Company	Wholesale Water	5	600,375	5	552,155	6	575,210	7	465,216	7	465,216
KCP&L	Utility										
Ford Motor Co.	Commercial										
Public Water Dist No. 2 - Cass Co.	Wholesale Water		309,804	8	309,804			10	285,266	10	285,266
City of Platte City	Wholesale Water	9	361,084	9	297,185	10	298,040	9	330,140	9	330,140
Veolia - Kansas City	Utility					7	368,803	8	403,892	8	403,892
Bayer Crop Science	Commercial										
Dogwood Energy Facility	Utility	7	408,293	10	204,323	7	313,248				
Pollution Control Department	Utility							6	473,051	6	473,051
Jackson County PWSD No. 2	Wholesale Water					8	311,712				
Trigen - Kansas City	Utility	8	405,662	6	405,662						

User	Type of Business	FYE 2014		FYE 2015		FYE 2016		FYE 2017		FYE 2018	
		Consumption		Consumption		Consumption		Consumption		Consumption	
		Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)	Rank	(100 cubic ft.)
City of Lee's Summit	Wholesale Water	1	1,337,990	1	1,158,421	1	1,085,887	1	1,299,392	1	1,255,534
Jackson County PWSD No. 1	Wholesale Water	2	1,165,515	2	1,086,747	2	993,062	2	1,091,671	2	1,118,992
City of Belton	Wholesale Water	3	892,774	3	756,111	3	896,335	6	551,936	3	904,462
City of Raymore	Wholesale Water	5	681,226	4	694,981	4	659,421	3	707,192	4	726,905
City of Blue Springs	Wholesale Water	4	775,864	6	539,390	10	230,650	7	528,055	6	526,106
Raytown Water Company	Wholesale Water	6	536,878	5	564,064	5	550,473	5	562,841	5	526,632
KCP&L	Utility	8	504,550	8	444,332	7	514,356			9	442,137
Ford Motor Co.	Commercial	10	347,806	10	389,774	6	546,240	9	466,116	10	416,257
Public Water Dist No. 2 - Cass Co.	Wholesale Water							10	465,054	7	518,291
City of Platte City	Wholesale Water					9	428,825				
Veolia - Kansas City	Utility	7	525,638	7	478,288	8	504,291	4	706,133		
Bayer Crop Science	Commercial	9	389,998								
Dogwood Energy Facility	Utility			9	400,258			8	518,856	8	451,910
Pollution Control Department	Utility										
Jackson County PWSD No. 2	Wholesale Water	10	354,444								
Trigen - Kansas City	Utility										

Source: Performance Management Division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Largest Users of the System - Sewer Fund**  
**Last Ten Fiscal Years**

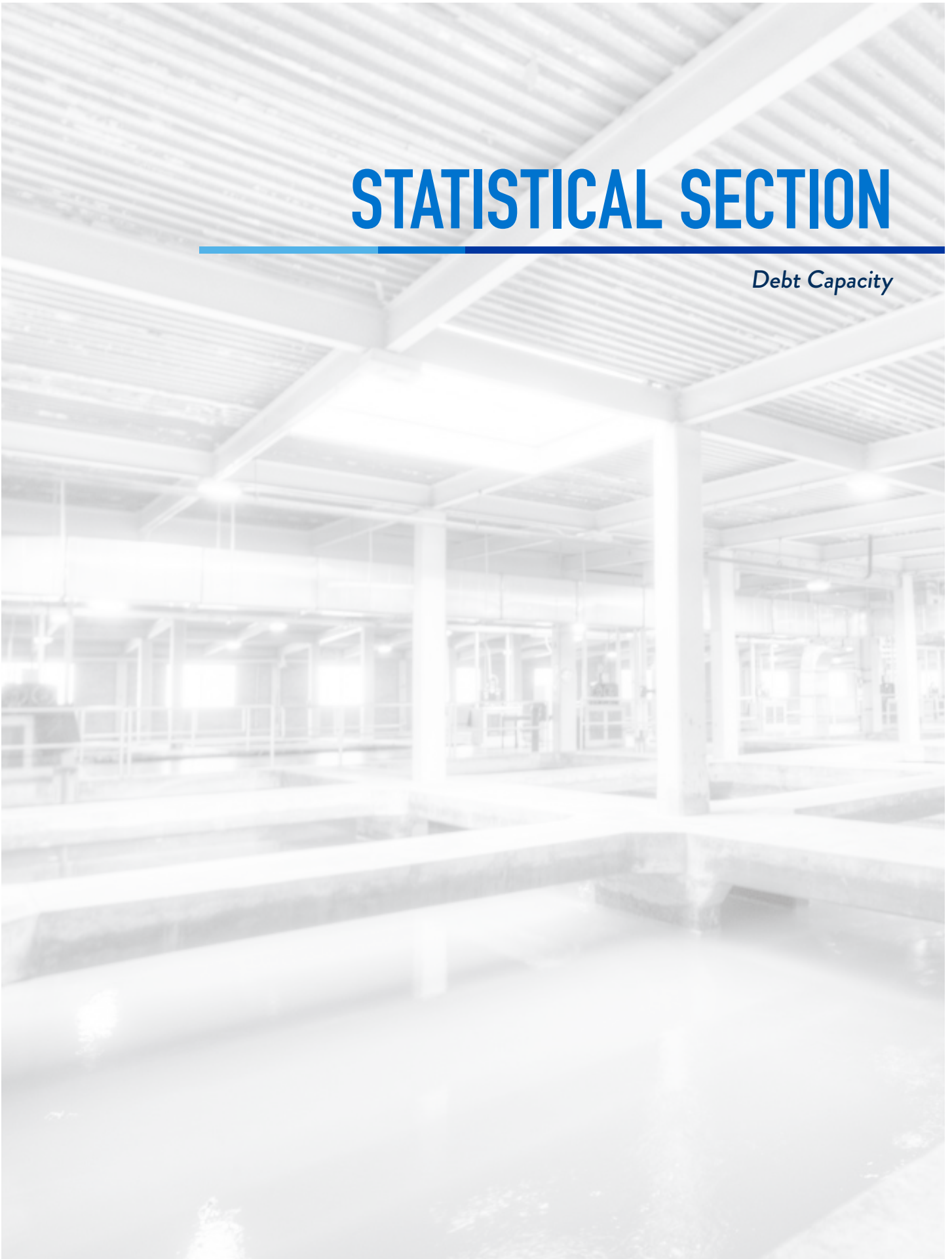
User	FYE 2009		FYE 2010		FYE 2011		FYE 2012		FYE 2013	
	% of Total		% of Total		% of Total		% of Total		% of Total	
	Rank	Revenue	Rank	Revenue	Rank	Revenue	Rank	Revenue	Rank	Revenue
Johnson County, KS	1	14.80%	1	13.23%	1	14.00%	1	11.08%	1	8.62%
Liberty, MO	2	4.20%	2	3.81%	2	4.00%	2	3.45%	3	2.31%
Gladstone, MO	3	3.60%	3	3.23%	3	3.00%	3	2.78%	2	2.69%
North Kansas City, MO	4	2.10%	4	2.28%	4	2.00%	4	1.87%	4	1.92%
Ford Motor Company	5	1.40%	6	0.96%	6	1.00%	7	0.59%	6	0.94%
Raytown, MO	6	1.00%	5	0.99%	5	1.00%	5	0.94%	7	0.75%
Trigen - Kansas City	7	0.80%	7	0.93%	7	1.00%				
Riverside, MO	8	0.60%	9	0.60%	9	0.70%	8	0.58%		
Pleasant Valley, MO	9	0.50%	10	0.44%	10	0.50%	9	0.40%	8	0.42%
Independence, MO	10	0.40%	8	0.65%	8	0.70%	10	0.34%	9	0.37%
Honeywell										
Roberts Dairy										
Veolia - Kansas City							6	0.65%	5	1.17%
Cook Family Foods									10	0.36%
	FYE 2014		FYE 2015		FYE 2016		FYE 2017		FYE 2018	
	% of Total		% of Total		% of Total		% of Total		% of Total	
	Rank	Revenue	Rank	Revenue	Rank	Revenue	Rank	Revenue	Rank	Revenue
Johnson County, KS	1	8.62%	1	8.93%	1	10.01%	1	9.94%	1	8.75%
Liberty, MO	3	2.31%	2	2.55%	2	3.00%	2	3.15%	5	1.03%
Gladstone, MO	2	2.69%	3	2.70%	3	2.71%	4	2.30%	2	2.30%
North Kansas City, MO	4	1.92%	4	1.94%	5	1.93%	5	1.65%	3	2.03%
Ford Motor Company	6	0.94%	6	0.91%	6	1.24%	3	2.54%	4	1.29%
Raytown, MO	7	0.75%	7	0.75%	8	0.70%	9	0.63%	7	0.73%
Trigen - Kansas City										
Riverside, MO										
Pleasant Valley, MO	8	0.42%								
Independence, MO	9	0.37%	9	0.48%	9	0.57%	10	0.45%		
Honeywell			8	0.70%	7	0.85%	8	0.66%		
Roberts Dairy					10	0.56%				
Veolia - Kansas City	5	1.17%	5	1.33%	4	2.10%	6	1.17%		
Cook Family Foods	10	0.36%	10	0.46%			7	0.77%	6	0.89%
Hospital Corp of America									8	0.55%
KC Parks & Rec District 3									9	0.49%
Childrens Mercy Hospital and Clinics									10	0.46%

Source: Performance Management Division records within KC Water.

# STATISTICAL SECTION

---

*Debt Capacity*



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Revenue Bond Coverage Ratios**  
**Last Ten Fiscal Years**  
*(In Thousands)*

A.

Fiscal Year	Water Fund				Debt Service requirements (3)			
	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service (3)		Principal	Interest	Total	Coverage
2008	\$ 87,201	\$ 61,358	\$ 25,843	\$	11,986	\$ 7,920	\$ 19,906	1.30
2009	88,191	63,534	24,657		12,771	8,418	21,189	1.16

- (1) Generally, gross revenues include water sales, other water revenues, interest on investments, income from jobbing and contract work and miscellaneous revenues derived from the water system. Beginning in fiscal year 2003, the principal portion of contract payments received from other governmental units were included in gross revenues.
- (2) Generally, direct operating expenses include power and pumping, general and electrical maintenance, purification, laboratory services, transmission and distribution, customer service, mechanical maintenance, customer accounting and collection, and administrative and general expenditures. Excluded from operating expenses are depreciation and amortization expenditures.
- (3) The numbers reflect the total annual fiscal year's debt service requirements on all the outstanding water revenue parity bonds and lease purchases

B.

In March 2009, the City created a new master bond ordinance that updated key definitions, descriptions, covenants and provisions, including the calculation of new annual debt coverage ratios. The new ordinance requires a calculation based on (i) debt service on all senior bonds; (ii) debt service requirements on all water bonds and (iii) debt services requirements on all water bond issues and other system obligations.

B1.

Fiscal Year	Water Fund Senior Bonds Only				Debt Service Requirements (4)			
	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service (3)		Principal	Interest	Total	Coverage
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$	9,405	\$ 6,190	\$ 15,595	2.24
2011	117,399	59,398	58,001		12,045	8,415	20,460	2.83
2012	127,216	68,588	58,628		12,740	7,933	20,673	2.84
2013	151,305	74,979	76,326		13,265	8,828	22,093	3.45
2014 <sup>(7)</sup>	145,478	80,718	64,760		13,200	10,306	23,506	2.76
2015	152,727	75,953	76,774		13,810	11,347	25,157	3.05
2016	157,183	72,187	84,996		13,380	13,238	26,618	3.19
2017 <sup>(7)</sup>	167,093	83,353	83,740		14,850	13,688	28,538	2.93
2018	169,077	84,923	84,154		17,900	15,610	33,510	2.51

B2.

Fiscal Year	Water Fund All Water Revenue Bonds				Debt Service Requirements (5)			
	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service (3)		Principal	Interest	Total	Coverage
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$	10,505	\$ 7,821	\$ 18,326	1.91
2011	117,399	59,398	58,001		13,290	9,995	23,285	2.49
2012	127,216	68,588	58,628		14,040	9,455	23,495	2.50
2013	151,305	74,979	76,326		14,625	10,289	24,914	3.06
2014 <sup>(7)</sup>	145,478	80,718	64,760		14,625	11,704	26,329	2.46
2015	152,727	75,953	76,774		15,300	12,678	27,978	2.74
2016	157,183	72,187	84,996		14,940	14,500	29,440	2.89
2017 <sup>(7)</sup>	167,093	83,353	83,740		16,485	14,877	31,362	2.67
2018	169,077	84,923	84,154		19,610	16,723	36,333	2.32

B3.

Fiscal Year	Water Fund All Water Revenue Bonds and Other Water System Obligations				Debt Service Requirements (6)			
	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service (3)		Principal	Interest	Total	Coverage
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$	12,059	\$ 8,532	\$ 20,591	1.70
2011	117,399	59,398	58,001		16,539	11,257	27,796	2.09
2012	127,216	68,588	58,628		17,385	10,590	27,975	2.10
2013	151,305	74,979	76,326		18,100	11,294	29,394	2.60
2014 <sup>(7)</sup>	145,478	80,718	64,760		18,236	12,573	30,809	2.10
2015	152,727	75,953	76,774		19,053	13,406	32,459	2.37
2016 <sup>(8)</sup>	157,183	72,187	84,996		16,872	14,808	31,680	2.68
2017 <sup>(7)</sup>	167,093	83,353	83,740		16,485	14,877	31,362	2.67
2018	169,077	84,923	84,154		19,610	16,723	36,333	2.32

- (1) Operating revenues includes all income and revenues derived and accrued by the City from the operation of the water system, including capital repayments and interest on investments.
- (2) Operating expenses means all reasonable and necessary expenses of operating and maintaining the water system but, excluding administrative services fees, capital lease payments, depreciation and amortization charges, interest paid on water revenue bonds, any non-cash OPEB obligations and any other items listed in Section 4.3 (a)(2)-(11) of the master bond ordinance.
- (3) Net operating revenues are adjusted to exclude revenues or expenses resulting from gain or loss, or mark-to-market change to any hedge agreements.
- (4) Debt service includes senior bonds only.
- (5) Debt service includes all water revenue bonds.
- (6) Debt service includes all water revenue bonds and other water system obligations.
- (7) Restated.
- (8) Debt Service on all Water Obligations includes AMR obligations. On October 25, 2015, \$14,612,688 in remaining principal on AMR obligations were paid off. Debt Service-All Water Obligations does not reflect this final un-scheduled payment. This year has been restated to reflect only the scheduled AMR obligation payments for 2016.

C.

Sewer Fund (1)									
Fiscal Year	Gross Revenues (2)	Direct Operating Expenses (3)	Available for Debt Service	Debt Service requirements (4)				Gross Coverage	Net Coverage (5)
				Principal	Interest	Total	SRF subsidy		
2008	\$ 71,241	\$ 46,565	\$ 24,676	\$ 9,480	\$ 8,412	\$ 17,892	\$ 3,381	1.38	1.70
2009	76,022	52,232	23,790	10,805	8,471	19,276	3,242	1.23	1.48
2010	82,492	54,221	28,271	11,155	10,257	21,412	2,612	1.32	1.50
2011	100,486	50,803	49,683	13,679	10,609	24,288	2,612	2.05	2.29
2012	107,541	54,253	53,288	14,635	10,413	25,048	2,352	2.13	2.35
2013	123,522	60,414	63,108	16,045	13,166	29,211	2,245	2.16	2.34
2014 <sup>(6)</sup>	139,231	62,525	76,706	18,425	14,954	33,379	1,947	2.30	2.44
2015	158,252	71,588	86,664	18,726	14,194	32,920	1,585	2.63	2.77
2016	181,742	82,623	99,119	17,886	13,351	31,237	1,240	3.17	3.30
2017 <sup>(6)</sup>	198,493	88,017	110,476	21,090	17,040	38,130	963	2.90	2.97
2018	212,613	110,507	102,106	19,550	17,035	36,585	746	2.79	2.85

- (1) The gross revenues and direct operating expenses only reflect that of the sewer fund and do not include the stormwater fund.  
 (2) Generally, the gross revenues include retail sewer charges, intermunicipal sewer charges, other operating revenues and interest income on investments derived from the sewer system.  
 (3) Generally, direct operating expenses include sewage treatment and pumping, sewer maintenance, administrative and general, and industrial waste control. Excluded from direct operating expenses are depreciation and amortization.  
 (4) The numbers reflect the total annual fiscal year's debt service requirements on all the outstanding senior and junior sewer revenue bonds.  
 (5) The Sewer Parity Bond ordinance allows the interest earnings subsidy received under the Revolving Fund Agreement to reduce debt service requirements for the purpose of calculating annual debt service coverage.  
 (6) Restated.

D.

Storm Water Fund							
Fiscal Year	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service	Debt Service Requirements (3)			
				Principal	Interest	Total	Coverage
2010	\$ 12,548	\$ 9,097	\$ 3,451	\$ 366	\$ 85	\$ 451	7.65
2011	11,288	8,524	2,764	371	79	450	6.13
2012	11,707	9,581	2,126	378	73	451	4.70
2013	13,263	9,955	3,308	463	66	529	6.25
2014	13,093	10,750	2,343	383	60	443	5.29
2015	13,854	11,703	2,151	390	53	443	4.86
2016	13,918	11,812	2,106	397	47	444	4.74
2017 <sup>(4)</sup>	13,571	13,391	180	403	41	444	0.41
2018	14,302	14,381	(79)	410	34	444	(0.18)

- (1) Generally, the gross revenues include storm water fees and other operating revenues.  
 (2) Generally, direct operating expenses include sewage treatment and pumping, sewer maintenance and administrative and general expenses.  
 (3) Excluded from direct expenses are depreciation and amortization.  
 (4) Restated.



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Historical Revenue Bonds and Capital Leases - Water Fund**  
**Last Ten Fiscal Years**

Issue	Maturity Through	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
2008 Series A	December 2027	35,000,000	33,900,000	32,655,000	31,355,000	29,995,000	28,570,000	27,080,000	25,520,000	23,885,000	22,175,000
2009 Series A	December 2032	198,915,000	189,510,000	177,465,000	164,725,000	153,125,000	141,205,000	128,715,000	118,525,000	107,905,000	97,625,000
2012 Series A	December 2036	-	-	-	47,725,000	46,060,000	44,780,000	43,460,000	42,100,000	40,700,000	39,255,000
2013 Series A	December 2037	-	-	-	-	54,000,000	54,000,000	54,000,000	53,350,000	52,655,000	51,090,000
2014 Series A	December 2038	-	-	-	-	-	-	54,365,000	53,185,000	51,975,000	50,280,000
2015 Series A	December 2039	-	-	-	-	-	-	59,790,000	59,790,000	58,865,000	58,380,000
2017 Series A	December 2041	-	-	-	-	-	-	-	-	78,130,000	75,700,000
AMR Capital Lease - 2008	December 2017	10,684,261	9,817,761	8,652,080	7,477,139	6,261,137	5,002,639	3,700,159	-	-	-
AMR Capital Lease - 2009	December 2019	-	24,158,808	22,075,391	19,905,795	17,646,456	15,293,661	12,843,545	-	-	-
		<u>244,599,261</u>	<u>257,386,569</u>	<u>240,847,471</u>	<u>271,187,934</u>	<u>307,087,593</u>	<u>288,851,300</u>	<u>383,953,704</u>	<u>352,470,000</u>	<u>414,115,000</u>	<u>394,505,000</u>
Add premium:		9,321,756	8,926,486	8,531,217	12,841,428	17,013,854	16,232,815	23,716,521	22,596,586	28,765,488	27,349,058
Less:											
Current portion		(11,290,104)	(16,539,098)	(17,384,537)	(18,100,341)	(18,236,293)	(19,052,596)	(18,839,461)	(16,485,000)	(19,610,000)	(19,625,000)
Discount		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(143,702)</u>	<u>(137,725)</u>	<u>(380,431)</u>	<u>(364,233)</u>	<u>(508,869)</u>	<u>(486,129)</u>
Noncurrent revenue bonds and capital leases payable		<u><u>242,630,913</u></u>	<u><u>249,773,957</u></u>	<u><u>231,994,151</u></u>	<u><u>265,929,021</u></u>	<u><u>305,721,452</u></u>	<u><u>285,893,794</u></u>	<u><u>388,450,333</u></u>	<u><u>358,217,353</u></u>	<u><u>422,761,619</u></u>	<u><u>401,742,929</u></u>

Source: Comprehensive Annual Financial Report for 2018 and historical audited financials for remaining years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Historical Revenue Bonds and Capital Leases - Sewer Fund**  
**Last Ten Fiscal Years**

Issue	Maturity Through	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
State Series 1992B	July 2013	475,000	390,000	300,000	205,000	105,000	-	-	-	-	-
State Series 1995B	January 2015	8,290,000	6,985,000	5,650,000	4,285,000	2,890,000	1,460,000	-	-	-	-
State Series 1996A	January 2016	11,550,000	10,165,000	8,700,000	7,150,000	5,510,000	3,775,000	1,940,000	-	-	-
State Series 1997A	January 2017	10,070,000	8,905,000	7,720,000	6,505,000	5,265,000	3,995,000	2,695,000	1,365,000	-	-
State Series 1998A	January 2019	5,640,000	5,190,000	4,720,000	4,230,000	3,710,000	3,165,000	2,590,000	1,990,000	1,360,000	695,000
State Series 1999A	January 2020	3,880,000	3,605,000	3,320,000	3,020,000	2,705,000	2,375,000	2,025,000	1,660,000	1,275,000	870,000
State Series 2000A	July 2020	8,390,000	7,770,000	7,140,000	6,495,000	5,835,000	5,165,000	4,480,000	3,775,000	3,055,000	2,320,000
State Series 2000B	July 2020	7,560,000	7,000,000	6,435,000	5,855,000	5,265,000	4,660,000	4,040,000	3,405,000	2,755,000	2,090,000
Stormwater 2000	December 2020	815,100	753,200	690,300	626,300	561,200	495,000	427,700	359,200	289,600	218,800
Series 2001A	March 2012	2,030,000	1,380,000	705,000	-	-	-	-	-	-	-
Stormwater 2001 & 2002	December 2021	4,008,000	3,727,000	3,442,000	3,152,000	2,858,000	2,559,000	2,255,000	1,946,000	1,632,000	1,313,000
State Series 2001B	July 2022	12,655,000	11,890,000	11,105,000	10,305,000	9,485,000	8,645,000	7,780,000	6,895,000	5,985,000	5,050,000
Series 2002D-1	January 2022	8,325,000	8,075,000	7,825,000	-	-	-	-	-	-	-
Series 2002D-2	January 2012	830,000	565,000	275,000	-	-	-	-	-	-	-
State Series 2002J	July 2022	7,520,000	7,065,000	6,600,000	6,125,000	5,640,000	5,145,000	4,635,000	4,110,000	3,570,000	3,015,000
Series 2004A	January 2024	16,005,000	15,180,000	14,330,000	13,450,000	940,000	-	-	-	-	-
Series 2004H	January 2025	8,685,000	8,225,000	7,760,000	7,280,000	6,795,000	6,305,000	5,810,000	5,300,000	4,775,000	4,235,000
Series 2005B	January 2025	13,320,000	12,715,000	12,085,000	11,430,000	10,750,000	10,040,000	9,300,000	-	-	-
Stormwater 2007	June 2027	492,400	469,400	446,400	422,400	319,000	301,000	282,000	263,000	243,000	223,000
Series 2007A	January 2032	39,000,000	37,965,000	36,880,000	35,750,000	34,575,000	33,355,000	32,085,000	-	-	-
Series 2009A	January 2034	69,480,000	69,480,000	67,250,000	65,765,000	63,820,000	61,820,000	59,755,000	57,615,000	55,400,000	53,105,000
Series 2009B	July 2030	-	1,191,875	5,912,256	9,576,202	9,036,996	12,002,958	11,371,600	10,726,000	10,065,900	9,390,900
Series 2011A	January 2037	-	-	-	89,030,000	86,625,000	84,140,000	81,555,000	78,865,000	76,060,000	73,135,000
Series 2012A	January 2037	-	-	-	-	78,650,000	76,795,000	74,055,000	71,230,000	68,295,000	65,245,000
Series 2016A	January 2040	-	-	-	-	-	-	-	183,740,000	176,990,000	170,885,000
Series 2018A	January 2042	-	-	-	-	-	-	-	-	-	165,000,000
		239,020,500	228,691,475	219,290,956	290,656,902	341,340,196	326,197,958	307,081,300	433,244,200	411,750,500	556,790,700
Add premium:		3,320,637	3,115,315	2,909,994	11,567,068	19,342,019	18,690,589	17,567,955	34,437,602	32,819,893	47,663,807
Less:											
Current portion		(11,520,900)	(13,745,331)	(14,489,290)	(16,255,673)	(18,621,354)	(19,116,658)	(18,282,100)	(21,493,700)	(19,961,818)	(25,236,300)
Discount		(407,156)	(385,318)	(363,478)	(412,475)	(634,829)	(607,837)	(566,990)	(804,562)	(764,785)	(989,296)
		<u>230,413,081</u>	<u>217,676,141</u>	<u>207,348,182</u>	<u>285,555,822</u>	<u>341,426,032</u>	<u>325,164,052</u>	<u>305,800,165</u>	<u>445,383,540</u>	<u>423,843,790</u>	<u>578,228,911</u>
Noncurrent revenue bonds and capital leases payable		<u>230,413,081</u>	<u>217,676,141</u>	<u>207,348,182</u>	<u>285,555,822</u>	<u>341,426,032</u>	<u>325,164,052</u>	<u>305,800,165</u>	<u>445,383,540</u>	<u>423,843,790</u>	<u>578,228,911</u>

Source: Comprehensive Annual Financial Report for 2018 and historical audited financials for remaining years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Ratios of Outstanding Debt**  
**Last Ten Calendar Years**  
*(In thousands)*

<b>Year</b>	<b>Water Fund Debt<sup>1</sup></b>	<b>Sewer Fund Debt<sup>1</sup></b>	<b>Total Debt</b>	<b>Percentage of Personal Income</b>	<b>Per Capita</b>
2009	244,599	239,021	483,620	4.19%	1,056
2010	257,387	228,692	486,079	4.27%	1,057
2011	240,847	219,691	460,538	3.82%	997
2012	278,657	301,603	580,260	4.79%	1,249
2013	323,957	360,047	684,004	5.59%	1,464
2014	304,946	344,281	649,227	5.11%	1,379
2015	407,290	324,083	731,373	5.26%	1,539
2016	374,702	466,877	841,579	6.12%	1,746
2017	442,371	443,806	886,177	6.06%	1,812
2018	421,368	603,465	1,024,833	6.88%	2,094

Sources: <sup>1</sup> Information comes from Comprehensive Annual Financial Report for 2018 and historical audited financials for remaining years



# STATISTICAL SECTION

---

*Demographic and Economic Information*

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Demographic and Economic Statistics**  
**Last Ten Calendar Years**

<b>Year</b>	<b>Population</b>	<b>Personal Income <sup>(6)</sup> (in Thousands)</b>	<b>Per Capita Personal Income <sup>(7)</sup></b>	<b>School Enrollment</b>	<b>Unemployment Rate <sup>(9)</sup></b>	
2009	457,963 <sup>(1)</sup>	11,535,630	25,189	55,927	9.8	
2010	459,787 <sup>(2)</sup>	11,382,487	24,756	56,391	10.0	
2011	462,091 <sup>(3)</sup>	12,056,416	26,091	56,764	8.9	
2012	464,511 <sup>(3)</sup>	12,107,944	26,066	57,549	7.3	
2013	467,251 <sup>(3)</sup>	12,242,911	26,202	57,042	7.3	
2014	470,882 <sup>(3)</sup>	12,712,872	26,998	55,360	6.9	<sup>(12)</sup>
2015	475,310 <sup>(3)</sup>	13,908,046	29,261 <sup>(11)</sup>	55,077	5.7	
2016	482,118 <sup>(3)</sup>	13,751,934	28,524 <sup>(11)</sup>	55,039	4.9	
2017	488,943 <sup>(3)</sup>	14,633,575	29,929 <sup>(11)</sup>	56,711	4.6	
2018	489,527 <sup>(4)</sup>	14,886,027	30,409	61,855 <sup>(8)</sup>	3.6	<sup>(10) (13)</sup>

Sources:

<sup>1</sup> The Calendar Year 2009 population estimate was provided by the City Planning and Development Department using interpolation between censuses.

<sup>2</sup> The 2010 Calendar Year population numbers are from the 2010 Census.

<sup>3</sup> Census Bureau's 2011 to 2017 Population Estimates Program. The 2015, 2016, and 2017 numbers have been restated.

<sup>4</sup> The Calendar Year 2018 estimates were provided by the City Planning and Development Department using extrapolation of the change from 2010 to 2017.

<sup>5</sup> Derived from population and per capita income, provided by City Planning and Development Department

<sup>6</sup> Fiscal Year 2009-2017 American Community Survey.

<sup>7</sup> For 2016 and 2017 the estimates are based upon averaging two figures: (1) the 2015 American Community Survey adjusted for CPI change from 2015 to 2016 and (2) City Planning and Development Department using extrapolation of the change from 2014 to 2015.

<sup>8</sup> Survey of school districts within Kansas City, MO as of April 30, 2018. niche.com was used for schools with no response.

<sup>9</sup> Kansas City, MO (city not MSA) Bureau of Labor Statistics Rpt: LAUCT2938000000000003, not seasonally adjusted.

<sup>10</sup> Kansas City, MO (city not MSA) Bureau of Labor Statistics Rpt: LAUCT2938000000000003, not seasonally adjusted monthly rate as of April 30, 2018.

<sup>11</sup> The 2015, 2016, and 2017 numbers have been restated due to a restatement of the population estimates.

<sup>12</sup> Restated from prior years

<sup>13</sup> Preliminary numbers

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Top 10 Principal Employers**  
**Current Year and Ten Years Ago**

<b>Employer<sup>1</sup></b>	<b>2018</b>		<b>Employer</b>	<b>2010</b>	
	<b>Employees</b>	<b>Percentage of Total Employment</b>		<b>Employees</b>	<b>Percentage of Total Employment</b>
Public School System <sup>3</sup>	32,477	2.95%	Federal Government	37,070	3.82%
State/County/City Government <sup>2</sup>	21,080	1.92%	Public School System (1)	29,566	3.05%
Federal Government	18,774	1.71%	State/County/City Government (2)	27,371	2.82%
Cerner Corp.	14,000	1.27%	HCA Midwest Health Systems	8,127	0.84%
HCA Midwest Health System	9,934	0.90%	Sprint Nextel Corp.	7,300	0.75%
The University of Kansas Hospital	9,810	0.89%	Saint Luke's Health System	6,622	0.68%
Saint Luke's Health System	8,020	0.73%	McDonald's USA LLC	5,700	0.59%
Ford Motor Co. Kansas City Assembly Plant	7,030	0.64%	Cerner Corp	4,980	0.51%
Children's Mercy	7,096	0.65%	Children's Mercy	4,812	0.50%
Sprint Corp.	6,000	0.55%	Truman Medical Center	4,081	0.42%
<b>Total employment Kansas City MSA<sup>4</sup></b>	<b>1,099,100</b>	<b>12.21%</b>	<b>Total employment Kansas City MSA<sup>4</sup></b>	<b>969,900</b>	<b>13.98%</b>

Sources: <sup>1</sup> Top Public-Sector Employers, Kansas City Business Journal, July 28, 2017 and Top 100 Area Private Sector Employers, Kansas City Business Journal, July 25, 2017.

<sup>2</sup> The number of local employees for the State/County/City Government is made up of seven (6) employers for 2017.

<sup>3</sup> The number of local employees for the public school systems is made up of twelve (12) public school systems and school districts for 2017 and **sixteen (16)** for 2008.

<sup>4</sup> Bureau of Labor Statistics, <https://www.bls.gov/sae/#tables> as of April 2018

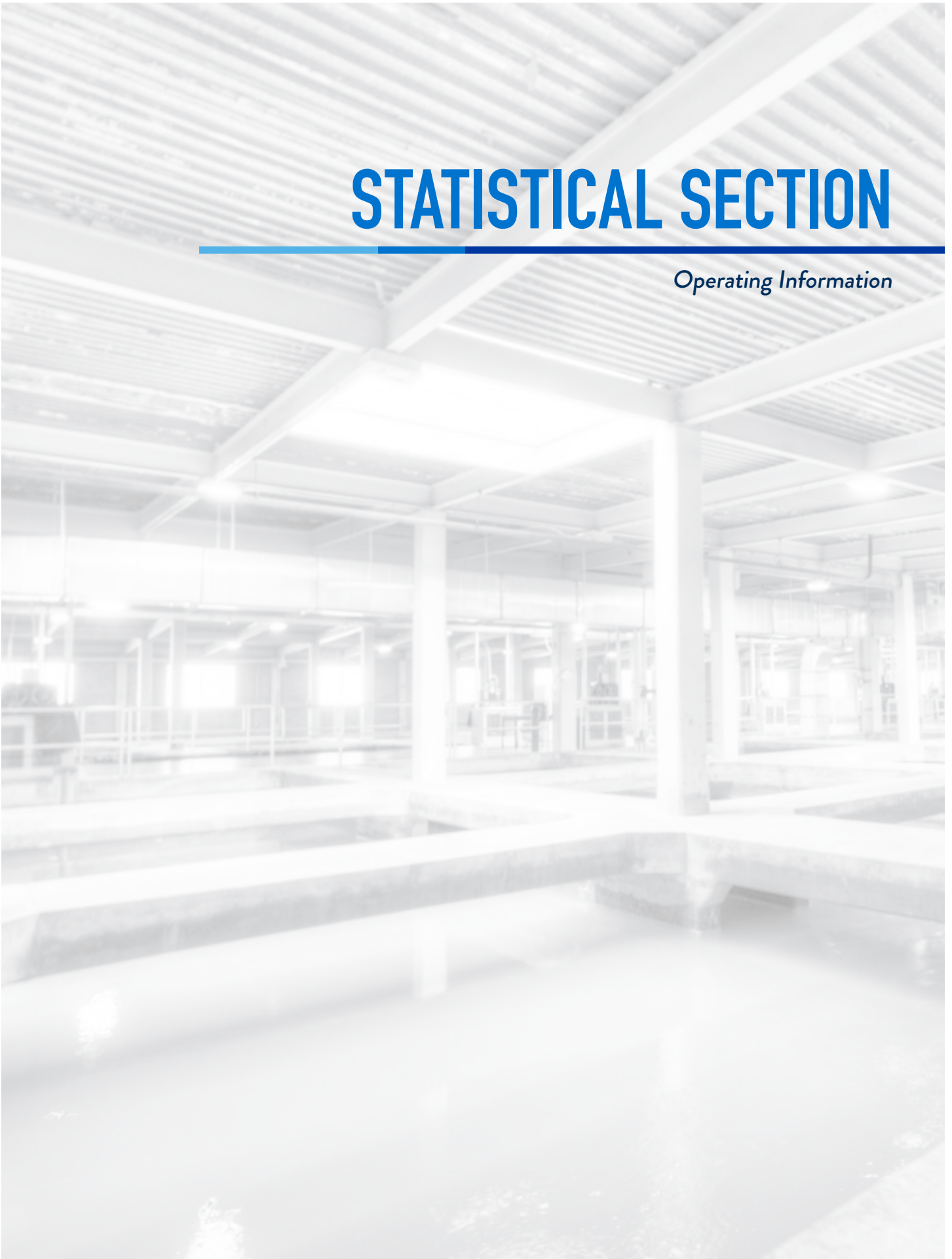
**\*\*The information presented in this table speaks only as of the date indicated in the source.**

Layoffs or developments after this date are not presented, and they can render some information in the table to be inaccurate.  
In general, job losses have occurred across most major industry sectors.

# STATISTICAL SECTION

---

*Operating Information*



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Operating Indicators**  
**Last Ten Fiscal Years**

Function	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Water</b>										
Water main breaks	821	911	1,214	1,700	1,846	1,375	852	815	686	723
Water Customers Served	156,881	159,000	160,000	167,051	168,603	168,000	168,000	171,500	172,000	172,280
Water Consumption (millions of gallons)	36,400	31,359	34,367	38,780	40,945	38,920	31,616	31,336	31,792	31,011
Average daily production (thousands of gallons)	99,630	95,420	103	102,180	112,000	113,000	96,270	95,200	113,000	94,417
Peak daily production (thousands of gallons)	149,140	143,000	176	176,890	197,000	240,000	146,600	141,000	159,000	147,630
Water mains (miles)	2,772	2,772	2,780	2,781	2,797	2,800	2,800	2,806	2,824	2,833
Fire Hydrants	22,732	22,732	23,103	23,181	23,662	23,000	23,801	24,252	24,348	24,750
Storage capacity (thousands of gallons)	128,230	128,230	133,400	141,000 #	120,000	141,000	141,000	155,000	155,000	155,000
<b>Sewer</b>										
Sanitary sewer (miles)	2,515	2,258	2,826	2,535	2,543	2,800	2,800	2,800	2,974	2,709
Sewer customers served	151,670	152,721	153,478	158,210	162,513	163,492	164,088	164,637	165,191	166,295
Average daily sewage treatment (millions of gallons)	115	117	117	103	91	72	93	111	96	72
Treatment capacity (millions of gallons)	154	153	154	155	155	155	155	155	150	155

Source: Performance Management division records within KC Water.

Water main breaks calculation change due to systems updates 2014-2017



**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Water**  
**Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Directors Office	10	10	9	7	11	9	7	7	9	9
Finance & Administration	17	16	18	21	21	29	29	29	30	30
Revenue Protection	-	4	5	6	6	6	7	7	7	7
Budget and Finance	-	1	1	1	1	-	-	-	-	-
Human Resources	6	5	5	5	7	7	10	11	12	12
Communications	3	3	3	6	4	4	5	5	6	6
Consumer Services	55	57	60	71	76	69	72	72	75	75
Information Technology	-	-	-	-	12	12	13	13	13	13
Laboratory Services	27	28	28	28	28	28	28	29	30	30
Engineering - Facilities	6	6	7	7	7	7	8	8	9	9
Engineering - General Services	4	2	-	-	-	-	1	1	1	1
Safety Management	3	3	3	3	3	3	3	3	4	4
Engineering - Distribution System	26	26	31	32	33	33	32	32	34	34
Engineering - Planning	10	11	12	10	10	10	10	10	10	10
Building Operations	-	4	5	5	5	5	5	5	5	5
Line Maintenance - General Services	5	5	5	7	7	7	7	7	7	7
Line Maintenance - Pipeline	97	93	93	96	108	107	109	122	131	131
Line Maintenance - Inspections	-	-	1	-	-	-	-	-	-	-
Water Supply - General Services	5	5	9	8	12	12	12	12	13	13
Water Supply - Operations	39	39	39	39	39	39	39	39	39	39
Water Supply - Maintenance	54	54	55	55	55	55	55	56	56	56
Industrial Waste Control	1	-	-	-	-	-	-	-	1	1
Reading & Services - Water Services	76	78	74	74	84	85	87	75	72	72
Reading & Services - Meter Reading	23	22	12	9	9	9	9	7	7	7
Stormwater Services	1	1	-	-	-	-	-	-	-	-
Waterways	-	-	-	-	-	-	-	-	1	1
Training & Development	1	-	-	-	-	-	-	-	-	-
Storeroom	10	11	6	6	6	6	6	6	6	6
Security Operations	4	7	11	5	5	5	4	4	3	3
Brush Creek Improvements	9	8	8	8	8	8	1	1	-	-
	492	499	500	509	557	555	559	561	581	581

Source: Performance Management division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Sewer Fund**  
**Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Directors Office	7	6	6	6	6	7	6	6	6	6
Contract Administration	4	4	5	5	5	5	5	5	7	7
Laboratory Services	-	7	7	7	6	6	6	5	5	5
Engineering - Facilities	1	1	3	3	3	3	3	3	5	5
Sanitary Sewer Spcl Assmt	6	6	5	-	-	-	-	-	-	-
Engineering - General Services	-	-	2	2	2	1	1	1	1	1
Overflow Control Program	3	3	6	6	6	6	7	7	9	9
Safety Management	2	2	2	2	2	2	2	2	2	2
Engineering - Distribution System	12	12	15	18	19	19	19	19	25	25
Engineering - Planning	6	6	7	9	9	9	10	10	10	10
Building Operations	-	5	5	4	4	5	5	5	6	6
Line Maintenance - Sewer Repair	110	109	110	120	123	125	126	127	124	124
Line Maintenance - General Services	11	9	8	7	11	11	10	10	10	10
Line Maintenance - Inspections	20	21	27	29	29	29	29	29	29	29
Wastewater Treatment-Maintenance	67	65	65	69	69	70	69	70	72	72
Wastewater Treatment-Operations	42	43	48	49	52	52	52	52	54	54
Industrial Waste Control	12	6	8	8	8	8	13	12	14	14
Training & Development	1	-	-	-	-	-	-	-	-	-
Storeroom	6	5	4	4	4	4	4	3	3	3
Security Operations	-	14	7	-	-	-	-	-	-	-
Household Hazardous Waste	7	7	8	1	2	2	1	1	-	-
	<u>317</u>	<u>331</u>	<u>348</u>	<u>349</u>	<u>360</u>	<u>364</u>	<u>368</u>	<u>367</u>	<u>382</u>	<u>382</u>

Source: Performance Management Division records within KC Water

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Stormwater Fund**  
**Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>	<b>FYE 2018</b>
Directors Office	1	1	1	1	1	1	-	-	-	-
Engineering - Planning	2	1	1	5	5	5	5	5	5	5
Catch Basin Cleaning & Repair	66	66	68	76	80	82	85	85	85	85
Stormwater Services	15	12	13	15	18	14	14	14	15	15
Stormwater Flood Monitoring	-	-	-	-	-	1	2	2	2	2
Engineering Stormwater Design	4	4	4	2	-	-	-	-	-	-
Waterways	-	-	-	-	-	-	5	5	5	5
Discharge Permit Programs	-	-	-	-	-	3	3	3	3	3
Household Hazardous Waste	-	-	-	-	-	-	1	1	1	1
	<u>88</u>	<u>84</u>	<u>87</u>	<u>99</u>	<u>104</u>	<u>106</u>	<u>115</u>	<u>115</u>	<u>116</u>	<u>116</u>

Source: Performance Management Division records within KC Water



4800 E. 63rd Street  
Kansas City, MO 64130  
816-513-1313 • [www.kcwaterservices.org](http://www.kcwaterservices.org)