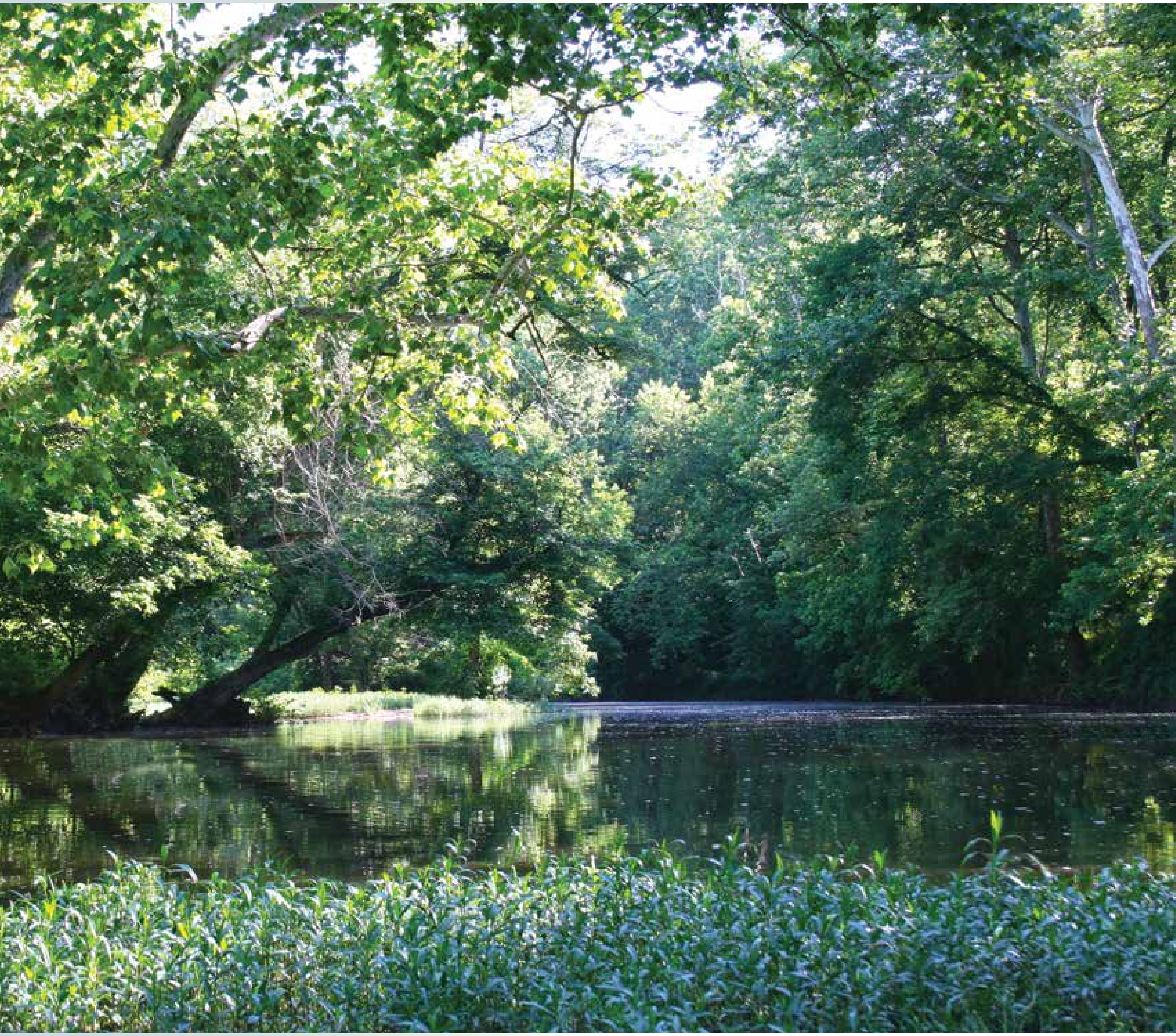
msd
Safe, clean waterways



ANNUAL REPORT

Fiscal Year Ended
June 30, 2016

MSD manages wastewater, drainage and flood protection for Louisville Metro —24 hours a day, everyday of the year— with more than 600 dedicated employees.

Our Vision

Achieving Safe, Clean Waterways for a Healthy and Vibrant Community

Our Mission

Providing Exceptional Wastewater, Drainage and Flood Protection Services for Our Community

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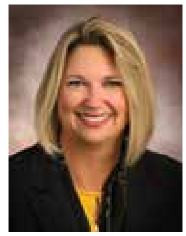
To Our Community

As we present this report, we look back on a year of great progress and, at the same time, look ahead to the challenges of ensuring our aging infrastructure is ready to serve tomorrow's Louisville.

James A. Parrott
Executive Director



Cynthia Caudill
Chair, MSD Board

First and foremost, we are pleased to report that MSD made tremendous strides this year in fulfilling our mission of providing exceptional wastewater, drainage and flood protection services for the community. Some of the successes highlighted in this report include:

- Completing a 36-year journey to eliminate more than 300 inefficient and outdated package wastewater treatment plants scattered throughout the community, and our transition to five regional water quality treatment centers;

- Starting construction of the underground, 17-million gallon Logan Street Basin, one of seven storage basins citywide in planning or construction phases, along with a 2.5-mile tunnel under Louisville's downtown that together will help us achieve the goal of capturing and treating 98 percent of combined sewer overflow volume by 2020;

- Enhancing our ability to protect residents from flooding through an $850,000 project that replaced the massive 63-year-old gate at Paddy's Run Flood Pump Station. This gate helps protect citizens across a large swath of the community extending from the Ohio River in Rubbertown, through Park DuValle to the area surrounding the Louisville International Airport;

- Providing emergency relief to residents in areas hit hardest by severe and frequent flooding by partnering with FEMA to conduct buyouts of homes in areas that should not have been developed—where streams and wetlands historically existed;

- Supporting more than 2,300 jobs in our community with the combined direct employment and jobs created by our infrastructure-improvement projects. As MSD continues its work, we strive to create economic opportunities in the community in an equitable way. As a result, $40 million in contracts were awarded to minority or woman-owned firms in the past fiscal year.

And while it's fulfilling to look back at these accomplishments, when we look forward we see much that still needs to be accomplished.

Louisville, like many cities, is faced with aging infrastructure that must be maintained and refurbished in order to continue to serve a growing community. Some of our underground infrastructure predates the Civil War, and much of our flood protection system was built when Harry S. Truman was president. In addition, an increased frequency of severe storms in recent years has amplified the need for our system to be ready to protect against the worst of today's weather.

MSD is committed to achieving our Mission of "Providing Exceptional Wastewater, Drainage and Flood Protection Services for Our Community." To this end, in 2017, we will roll out a "Critical Repair & Reinvestment Plan," which is a data-driven prioritization of $4.3 billion in capital improvements required during the next two decades. The needs are real, as are the risks. MSD is ready to engage our elected officials and the public in a community conversation to balance the risks along with a financially achievable plan to address the needs.

MSD consists of more than 600 proud, dedicated individuals who are here for our community 24/7, 365 days a year. We see our role in protecting Louisville's waterways as one of leadership, partnership and advocacy.

In the bigger picture, we're helping keep our rivers and our streams clean. In doing so, we are making our community safer and healthier. We're supporting the plants and wildlife that rely on clean waterways for a healthy ecosystem, and that in turn, helps with flood mitigation. We're enabling and enhancing recreational and tourism opportunities such as boating, swimming and fishing.

The bottom line is this: at MSD, we're here to make Louisville a better place. A cleaner place. A healthier place. To have a real impact on the quality of life of the place we all call home. Working together with our community and our partners, we can continue to pursue our Vision of "Safe, Clean Waterways for a Healthy and Vibrant Community."

Sincerely,

James A. Parrott
Executive Director

Cynthia Caudill
Chair, MSD Board

Enhancing Quality of Life through Our Core Services

MSD serves the Louisville Metro community through three core services:

- **Wastewater Collection and Treatment**
- **Stormwater and Drainage Management**
- **Flood Protection**

Through each of these core services, MSD works to enhance community health and safety:

- Improving water quality in our waterways
- Nurturing a green environment
- Promoting a growing community

Wastewater Collection and Treatment

The MSD Collection System, which operates beneath your feet, carries away wastewater—and in the older sections of our city it also carries rainwater—to be cleaned at one of our Water Quality Treatment Centers (WQTCs). Our service area, which includes Jefferson County and Crestwood in Oldham County, generates about 153 million gallons of wastewater daily that MSD treats and returns to our waterways. The Wastewater and Collection System consists of more than 3,300 miles of pipe, 259 pumping stations and five WQTCs.

Unfortunately, severe rain events still cause overflows of untreated sewage to occur. MSD continues with work to decrease these occurrences.

Transforming Our Sewer System
From 1985 to 2003, MSD spent nearly $1 billion on improvements to the wastewater collection and treatment system. The focus during this time was to provide safe, reliable sewer service by eliminating failing treatment facilities and septic tanks that were jeopardizing public health and safety on a daily basis. We built more than 1,000 miles of sewer interceptor and collector lines, which allowed the elimination of more than 300 poorly-performing package treatment plants that had exceeded their useful operation. These package plants were small treatment systems privately built about 60 years ago as part of the post-WWII building boom. The new collector sewer lines also allowed for the elimination of more than 40,000 failing septic tanks on private property by providing access to the sanitary sewer system.

The Clean Water Act—passed in 1972—established the framework to improve the water quality of waterways across the U.S. In 2005, MSD entered into a Consent Decree with the Kentucky Division of Water, the U.S. Environmental Protection Agency (EPA)-Region 4 and the U.S. Department of Justice to satisfy Clean Water Act requirements. It is a 19-year plan that requires MSD to minimize combined sewer overflows and eliminate sanitary sewer overflows, while maintaining our community's aging sewer system.

We are past the halfway point with the plan and on schedule to meet these water quality goals by 2024. However, the original estimate of $850 million—developed in 2005—has been revised to $943 million in capital expenses.

Above: Stormwater basins, such as this one in far southwestern Jefferson County, reduce wet-weather sewer overflows and decrease pollution in local waterways by providing storage during wet weather.

Stormwater and Drainage Management

MSD crews perform routine and preventive maintenance for the 376-square-mile stormwater drainage system in Louisville Metro,* which moves, stores or infiltrates stormwater as quickly and as efficiently as possible from neighborhoods and business districts during and after rainstorms. This work includes the maintenance of 67,668 catch basins; mowing of more than 19 miles of stream banks and flood protection levees; removal of obstructions from drainage channels and pipes; repair of cave-ins over storm facilities; and cleaning of earthen and concrete ditches.

* Their respective municipalities serve residents and businesses in the cities of Anchorage, Jeffersontown, St. Matthews and Shively.

Reducing stormwater runoff improves our waterways

Green infrastructure focuses on the preservation and restoration of landscape elements—rainwater storage and infiltration—by implementing features that mimic natural conditions. This can reduce rain flow to the sewer, thus decreasing sewer overflows.

MSD utilizes green infrastructure when possible to minimize impacts on traditional sewer infrastructure. Green infrastructure solutions include downspout disconnections from the sewer system, infiltration trenches, permeable pavers, rain barrels, rain gardens and vegetative roofs.

Right: Native species—such as the Cone Flower—are part of rain garden plantings.

Flood Protection

Louisville Metro's Ohio River Flood Protection System exists to keep the river at bay and out of the city. The system includes 29 miles of floodwall and earthen levee, 315 floodgates, 79 floodwall closures and 16 flood-pump stations. The flood-pump stations move inland water from creeks and streams to the river when the floodwall and levee are sealed. This system stands ready to safeguard our community every day of the year.

Our staff test the pump stations monthly to ensure that they function properly. In times of flooding, information collected from our network of rain gauges, customer calls and area monitoring allows resources to be directed to the most severely affected areas.

Above: The Pond Creek Flood Pump Station, part of the Southwest Extension of the Flood Protection System, can move more than 1.8 million gallons of water per minute.

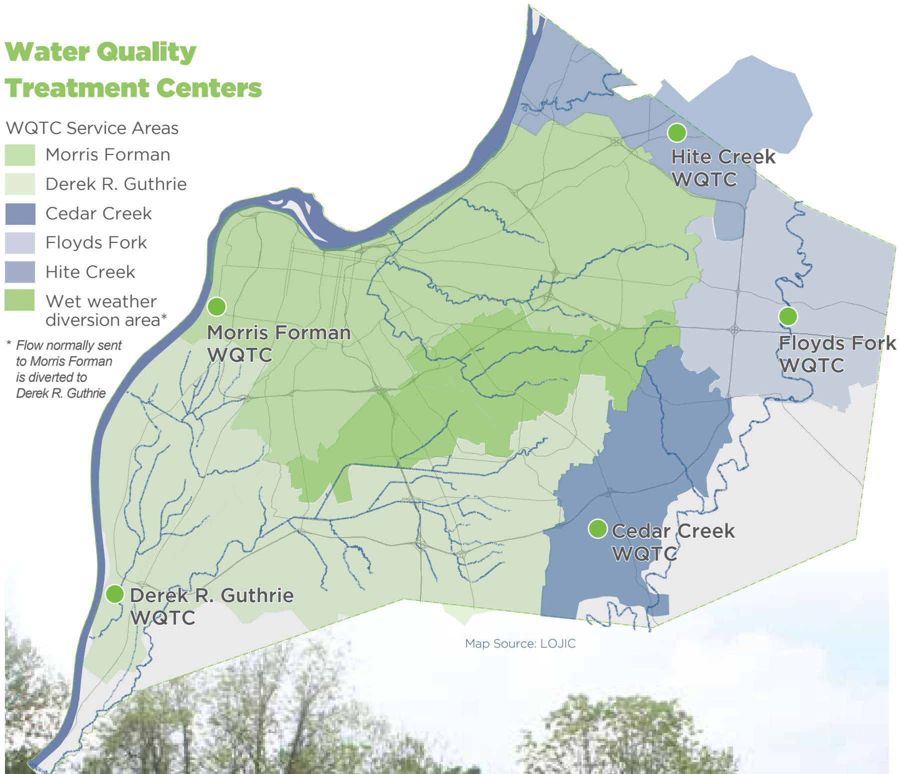
2016 Activity

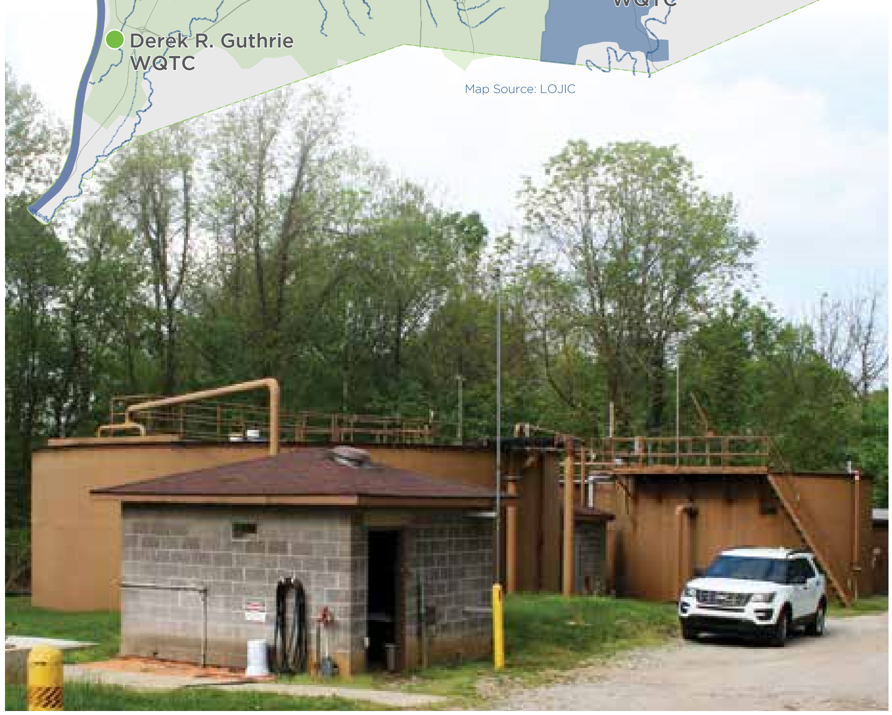
Reaching a Long Sought Milestone

MSD's Consent Decree plan, for the past three-year period, included eliminating the Jeffersontown Water Quality Treatment Center (WQTC), as well as 14 smaller publicly-owned package treatment plants. We reached this goal in June 2016, with the elimination of the last small package treatment plant in our system—McNeely Lake. This final elimination has left MSD with five regional WQTCs, which are more efficient and effective at meeting higher water quality standards than were the eliminated facilities. Not only will this reduce operational costs and maintenance issues related to the removed sites, it will also improve water quality in our river and streams.

Accomplishing our vision of achieving safe, clean waterways for a healthy and vibrant community is a long journey that will extend well beyond the completion date of the Consent Decree in 2024.

Water Quality Treatment Centers





Above: The last inefficient package treatment plant in MSD's system—McNeely Lake—was eliminated in June 2016, leaving MSD with five regional WQTCs, as shown on the map above.

Below: Floyds Fork is located in eastern Jefferson County.

Continuing Progress on Underground Storage

Underground storage basins are part of MSD's larger endeavor to prevent sewage overflows in our waterways. The basins are designed to capture rainwater and sewage, which otherwise can overwhelm the sewer system during rain events and flow untreated into local streams and the Ohio River. These underground storage areas retain the mixture of rainwater and sewage until the rain subsides and system capacity is available, and then it is gradually released back into the sewer system. At that point, the water is conveyed to a WQTC, treated and returned to our local streams or the Ohio River.

Currently, seven storage basins in the combined sewer system—Bells Lane, Clifton Heights, I-64 & Grinstead, Logan Street, Nightingale, Portland and Shawnee Park basins—are in design and construction phases. Muddy Fork and Bancroft—in the separate sewer system—are complete.

Storage Basins and Tunnel

Ohio River Tunnel

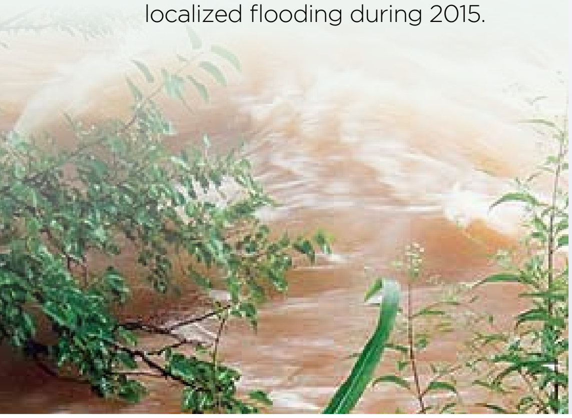
On September 30, 2016, the MSD Board approved a new plan to replace three planned basins—Lexington Road and Payne Street; Story Avenue and Main Street; and, 13th and Rowan streets—with a 2.5-mile-long tunnel. The Ohio River Tunnel will be 20-24 feet in diameter and located approximately 200 feet below the surface. That is more than 18 stories below ground.

Above: Construction is underway for the Logan Street Basin and is scheduled for completion in late 2017. This basin will offer Beargrass Creek and area residents protection from combined sewer overflows.

We are replacing these three basins with the tunnel due to advances in technology and reductions in boring costs that were not available when the plans for these basins were developed nearly 10 years ago. The tunnel offers the storage capacity of the three basins for approximately the same cost—but construction will be far less disruptive along Louisville's Main Street and Butchertown's business district during the two-to-three year construction period. The tunnel and basins are required to be operational by the close of 2020.

Louisville Sees Fourth-Wettest Year On Record in 2015

At the close of 2015, the Ohio River was once again in flood stage. While the yearly average rainfall in our area is 44.91 inches, we saw a total of 62.41 inches of rainfall in 2015, making this the fourth-wettest year on record. This rainfall put tremendous stresses on MSD's systems throughout the year. The Ohio River Flood Protection System pump stations moved more than 16 billion gallons of water out of the city and into the river, helping diminish localized flooding during 2015.



Removing homes from the floodplain

Nearly 12,000 homes were constructed in flood-prone areas of Jefferson County prior to the establishment of the first FEMA floodplain maps in the 1970s. Many of these homes have been repeatedly damaged by heavy rain. Some homes were damaged once again by the heavy rain events in Spring 2015 to the extent that restrictions in the Metro Floodplain Ordinance prevented homeowners from obtaining rebuilding permits.

In response, representatives from Metro Council, MSD and the community formed a working group to develop assistance for these homeowners. Ultimately, MSD created and funded a $1.5 million Quick Buy Program to purchase homes with the most damage as defined by the Metro Ordinance. To qualify, the damage must have been equal to or exceeded 50 percent of the home's value from this event or from events over the past 10 years. Twenty-four qualifying homes were purchased and demolished during 2016. The remaining land is now deed-restricted for open space use, such as stream buffers or temporary stormwater storage.

MSD is working with FEMA on 10 additional grant programs for flood mitigation. By the close of FY 2016, we completed the purchase and demolition of 127 homes in West Louisville, at a cost just over $7.5 million. An advisory group, including area residents, was formed to determine the best use of these flood-prone properties for the community.

Repairing 100-Year-Old Sewer Lines

Many of the sewers in downtown Louisville are more than 100 years old, and are vulnerable to erosion caused by groundwater from heavy rains. As a result, we have increased expenses for the repair of aging infrastructure.

The Broadway Trunk Sewer is a three-ring brick sewer measuring 8-feet in diameter. Built in 1867, this sewer line has experienced three major collapses in the past three years.

- May 18, 2014, at Hancock Street
- July 7, 2015, at Floyd Street
- August 1, 2016, between First and Second streets

Additionally, Zorn Avenue and South Floyd Street at Boxley Avenue experienced sewer collapses due to the heavy rainfall during 2015, and Wenzel Street experienced a sewer collapse in July 2016.

Above: MSD Crews work to repair a Broadway Trunk Sewer collapse.

Paddy's Run Gate Installation

A large swath of the population of Louisville Metro—extending from the Ohio River in Rubbertown, through Park DuValle to the area surrounding the Louisville International Airport—became a bit safer from flooding on June 22, 2016, as a massive gate was replaced at Paddy's Run Flood Pump Station, which is located on the Ohio River in Rubbertown.

The new gate replaces the original, which was installed in 1953 by the U.S. Army Corps of Engineers. The original gate was pitted, corroded and well beyond its useful life. The Corps first cited this gate for replacement in 1990. Due to budget constraints and other priorities, the replacement was postponed for 26 years.

The new $850,000 gate is just one component of needed renovations at the Paddy's Run station. When the river is high and heavy rains strike the city, the gate is closed to keep the river at bay. The pumps are then engaged to push the rainwater out of the city into the river. Massive evacuations of areas near the site will be required if this gate ever fails.

The station still requires $23 million to replace the six pumps and the electrical system. Longer term, it will also need an additional $37 million to support the 56 percent increase in the population of Jefferson County since the station was built.

Left: The new gate for Paddy's Run is lowered by crane, as crews guide it into its housing in June 2016.

Morris Forman WQTC experiences floods and power outages

On April 8, 2015, at approximately 9:40 PM, the Morris Forman Water Quality Treatment Center (WQTC) experienced a power outage due to a surge in the high-voltage yard. This surge affected the South Oil Circuit Breaker and caused a small fire. While the power was out, approximately 40 percent of the plant treatment processes and equipment were flooded with diluted wastewater. Electrical, mechanical and treatment equipment in various portions of the facility sustained significant damage. Power was restored by 5:30 AM the following day.

Once the primary power supply was restored, MSD began cleanup, repair and replacement of the treatment systems. Our crews and contractors pumped wastewater out of the lower areas of the plant. Within 12 hours, Morris Forman WQTC regained preliminary and primary treatment; disinfection; and, dechlorination. Through the remainder of April, Batteries A, B, and C were re-established to provide full biological treatment. We were in full compliance with our required U.S. Environmental Protection Agency standards for this facility in June 2015.

Even though these events took place in FY 2015, the repairs continued throughout FY 2016.

Above: Morris Forman WQTC is situated on the Ohio River in western Louisville. It began operation in 1958, as the first wastewater treatment facility in Kentucky.

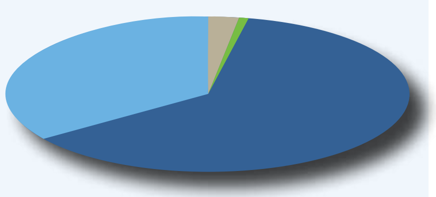
Financials

MSD is committed to operating at the highest levels of financial integrity. We recognize that the reliability of our financial statements is driven by the personal attributes of competence, professional judgment and ethical standards of our employees. Financial information is available anytime to our customers and investors through our website or upon special request. Additional information regarding the integrity of our financial statements is provided by outside parties.

CAPITAL SPENDING BY CATEGORY

For FY 2016, MSD's total capital expenditures were $190,991,000.

- Consent Decree 66%
- Wastewater 31%
- Drainage 2%
- Flood Protection 1%



The graph above, shows the total capital expenditures for FY 2016 divided into four categories. Due to limited funding, mostly from revenue bonds, MSD's capital spending has been primarily directed toward the mandated Consent Decree projects. Additional funding will be needed in future years to upgrade and refurbish our aging infrastructure across all four categories as detailed in our new "Critical Repair & Reinvestment Plan."

The MSD capital program is crucial to maintain, operate and improve Louisville's aging sewer and flood protection systems to achieve safe, clean waterways for a healthy and vibrant community.

MSD undergoes an annual financial audit by an outside CPA firm. Crowe Horwath LLP conducted the audit for FY 2016, which ended June 30, 2016. Once again, we received an Unqualified Audit Opinion, which is referred to as a "clean opinion" because no irregularities were found, nor were any adjustments needed.

During 2016, MSD received another Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the 2015 Comprehensive Annual Financial Report (CAFR). This certificate is the highest award in the area of governmental accounting and financial reporting. An independent panel of experts judged the CAFR to attain the program's high standards, including demonstrating a "spirit of full disclosure" to clearly communicate financial results. This is the 26th consecutive year that MSD has received this recognition.

With the issuance of a $175 million revenue bond in 2016, MSD received updated credit ratings from Standard & Poor's and Moody's, based on their review of our financial results and management capabilities.

The results are the following ratings:

- Standard & Poor's: AA with a positive outlook
- Moody's: Aa3 with a stable outlook

Such strong credit ratings mean that MSD revenue bonds will continue to attract institutional investors and will continue to carry low interest rates.

For the past several years, MSD has lacked sufficient revenue to fund our operations, debt service requirements and the capital spending required by the Consent Decree. In 2009, the MSD Board adopted a financial plan consisting of annual rate increases —5.5 percent to 6.5 percent—coupled with bond issues to fund projected operating and capital spending requirements. As we are past the midpoint of our Consent Decree plan, its successful implementation is evident based on the following results:

- MSD wastewater rates are only two cents above the national average.
- Our service quality continues to receive national awards and local compliments.
- To date, we have met Consent Decree requirements, on schedule and within budget.
- Even with $1.8 billion in outstanding debt, MSD can still issue new bonds with AA ratings.

However, we realize that our customers expect us to establish an efficiently run organization, balancing the services we offer with the rates we charge. From this perspective, MSD has embarked on a continuous effort to become more financially efficient with both operating expenses and total debt service payments, as charts 1 and 2 show.

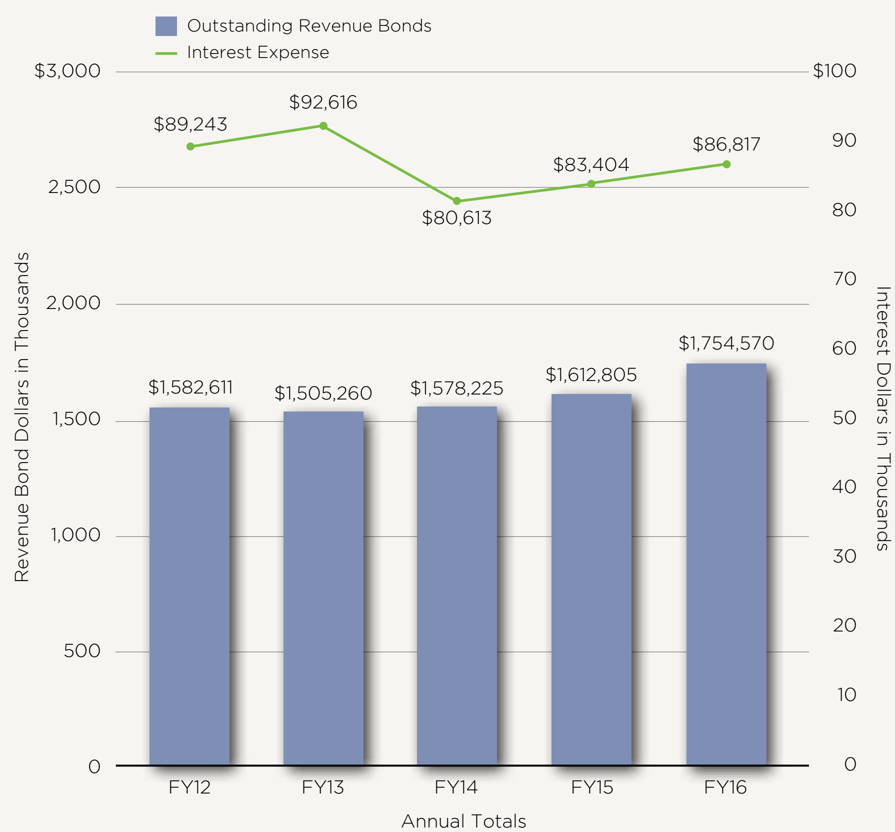
SERVICE & ADMINISTRATIVE EXPENSE / OPERATING RATIO PERFORMANCE (CHART 1)

Chart 1 illustrates the impact that combining stricter expense management with revenue growth has on the Operating Ratio. A decreasing Operating Ratio is indicative of an efficient operating environment, in which operating expenses are increasingly a smaller percentage of operating revenue. MSD established a more rigorous budgeting process, together with results oriented goals, to hold administrative expenses virtually flat for four years. The 2016 increase is due to ongoing emergency spending to repair the Morris Forman Water Quality Treatment Center from the flooding event in 2015.

Since MSD is a not-for-profit public entity, a lower Operating Ratio allows more operating revenue to be invested into the capital program, reducing the amount of future revenue bonds.

REVENUE BONDS/INTEREST EXPENSE (CHART 2)

Chart 2 shows the annual Interest Expense for the past five years along with the amount of Revenue Bonds outstanding at the end of each year. In total, the Interest Expense for 2016 is lower than the amount incurred for 2012. This decrease is even more impressive considering that MSD has issued three new Revenue Bonds during the last three years, increasing the total outstanding amount by $355 million. These lower Interest Expense amounts are the result of an active debt management focus and a very favorable interest rate environment, allowing for the refinancing of four Revenue Bonds that were originally issued with rates of more than 5 percent. In total, refinancing activity over the past few years will result in interest savings of $130 million during the next 20+ years.



CONDENSED STATEMENT OF NET POSITION (IN THOUSANDS)

	FY 2016	FY 2015	Variance	Percent Change	FY 2014
Unrestricted Current Assets	$ 103,671	$ 93,761	$ 9,910	10.6%	$ 111,934
Restricted Current Assets	20,378	16,342	4,036	24.7%	27,886
Capital Assets	2,573,262	2,392,466	180,796	7.6%	2,270,502
Restricted Noncurrent Assets	149,447	138,780	10,667	7.7%	134,036
Other Noncurrent Assets	29,315	30,807	(1,492)	-4.8%	33,501
Total Assets	**$ 2,876,073**	**$ 2,672,156**	**$ 203,917**	**7.6%**	**$ 2,577,859**
Deferred Outflow of Resources	$ 23,708	$ 20,407	$ 3,301	16.2%	$ 22,862
Total Assets and Deferred Outflows	**$ 2,899,781**	**$ 2,692,563**	**$ 207,218**	**7.7%**	**$ 2,600,721**
Current Liabilities	$ 17,420	$ 14,936	$ 2,484	16.6%	$ 13,653
Current Liabilities from Restricted Assets	85,186	74,697	10,489	14.0%	57,639
Noncurrent Liabilities	2,087,962	1,925,627	162,335	8.4%	1,898,150
Total Liabilities	**$ 2,190,568**	**$ 2,015,260**	**$ 175,308**	**8.7%**	**$ 1,969,442**
Deferred Inflow of Resources	$ 108,633	$ 92,233	$ 16,400	17.8%	$ 82,293
Total Liabilities and Deferred Inflows	**$ 2,299,201**	**$ 2,107,493**	**$ 191,708**	**9.1%**	**$ 2,051,735**
Invested in Capital Assets, Net	$ 534,946	$ 506,187	$ 28,759	5.7%	$ 418,784
Restricted, Net	84,639	80,424	4,215	5.2%	148,451
Unrestricted	(19,005)	(1,541)	(17,464)	1,133.3%	(18,249)
Total Net Position	**$ 600,580**	**$ 585,070**	**$ 15,510**	**2.7%**	**$ 548,986**
Total Liabilities, Deferred Inflows and Net Position	**$ 2,899,781**	**$ 2,692,563**	**$ 207,218**	**7.7%**	**$ 2,600,721**

CONDENSED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (IN THOUSANDS)

	FY 2016	FY 2015	Variance	Percent Change	FY 2014
Service Charges	$ 238,480	$ 225,462	$ 13,018	5.8%	$ 214,056
Other Operating Income	4,810	4,407	403	9.1%	2,576
Total Operating Revenues	**$ 243,290**	**$ 229,869**	**$ 13,421**	**5.8%**	**$ 216,632**
Investment Income	$ 17,891	$ 17,623	$ 268	1.5%	$ 20,330
Total Revenues	**$ 261,181**	**$ 247,492**	**$ 13,689**	**5.5%**	**$ 236,962**
Depreciation and Amortization Expenses	$ 62,820	$ 63,321	$ (501)	-0.8%	$ 63,516
Service and Administrative Expenses	87,155	76,245	10,910	14.3%	75,246
GASB 68 Pension Expense	4,003	(127)	4,130	-3,252.0%	-
Nonoperating Expenses	73,779	71,334	2,445	3.4%	71,128
Change in Fair Value—Swaps	22,951	5,240	17,711	338.0%	1,222
Total Expenses	**$ 250,708**	**$ 216,013**	**$ 34,695**	**16.1%**	**$ 211,112**
Net Income (Loss) before Contributions	**$ 10,473**	**$ 31,479**	**$ (21,006)**	**-66.7%**	**$ 25,850**
Contributions	5,037	4,605	432	9.4%	8,103
Change in Net Position	**15,510**	**36,084**	**(20,574)**	**-57.0%**	**33,953**
Beginning Net Position	585,070	548,986	36,084	6.6%	515,033
Ending Net Position	**$ 600,580**	**$ 585,070**	**$ 15,510**	**2.7%**	**$ 548,986**

SERVICE AND ADMINISTRATION COSTS (IN THOUSANDS)

	FY 2016	FY 2015	Variance	Percent Change	FY 2014
Labor	$ 55,229	$ 54,378	$ 851	1.56%	$ 57,249
Utilities	18,256	13,817	4,439	32.13%	14,563
Materials and Supplies	4,183	9,706	(5,523)	-56.91%	8,151
Contractual Services	28,376	20,943	7,433	35.49%	19,483
Chemicals	4,372	3,681	691	18.77%	3,306
Fuel	1,326	1,616	(290)	-17.95%	1,837
Insurance Premiums and Recovery	388	(960)	1,348	-140.42%	1,499
Bad Debt	2,603	2,068	535	25.87%	1,781
Other Operating Expenses	2,939	1,052	1,887	179.37%	944
Gross Service and Administrative Costs	**$ 117,671**	**$ 106,301**	**$ 11,370**	**10.70%**	**$ 108,814**
Capitalized Overhead	**$ (30,516)**	**$ (30,056)**	**$ (460)**	**1.53%**	**$ (33,568)**
Net Service and Administrative Costs	**$ 87,155**	**$ 76,245**	**$ 10,910**	**14.31%**	**$ 75,246**

MSD issued $175 million in revenue bonds in FY 2016. The sole purpose for these bonds is funding the mandated Consent Decree requirements and improving aging infrastructure. We follow sound financial practices that have allowed us to maintain strong AA credit ratings, which in turn allows us to minimize interest rates on borrowing. MSD also took advantage of the opportunity to refinance $85 million of our Series 2006A revenue bonds at a lower interest rate in FY 2016.

MSD's increase in operating revenues in FY 2016 was primarily driven by a rate increase of 5.5 percent on wastewater and stormwater service charges, effective August 1, 2015. We strive to maintain competitive rates with comparable cities in our region of the country, which can be seen on Chart 3.

Service and administrative costs increased $10.9 million in FY 2016. This increase was primarily driven by emergency repair expenses as a result of the Morris Forman WQTC flooding event in 2015.

What services do our customers receive for their money?

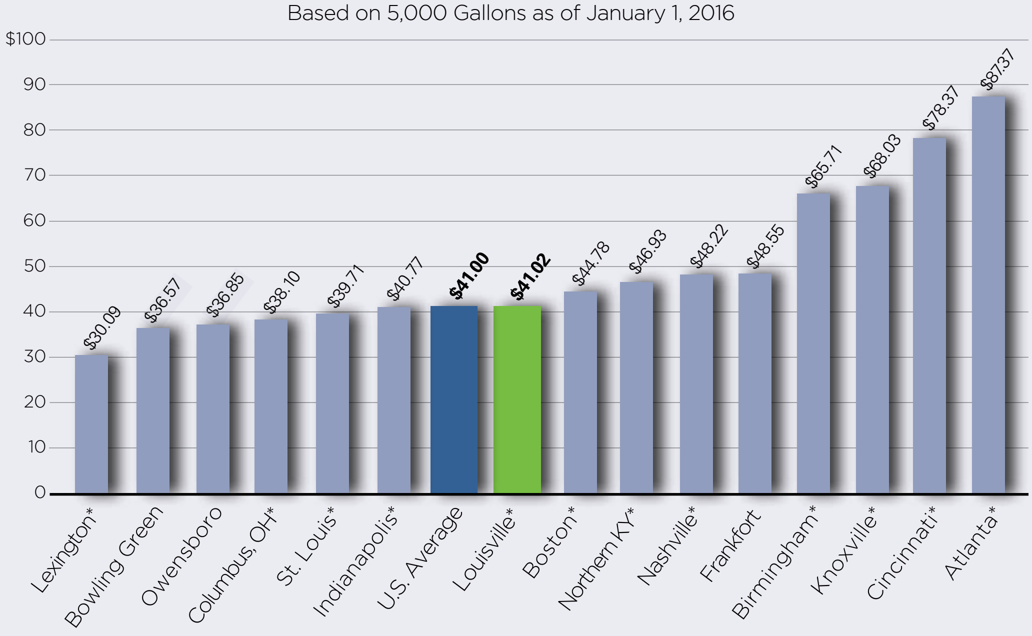
Most people are interested in obtaining value for what they spend. What services are MSD customers receiving for the rates paid? To help put this in perspective, the average Jefferson County household pays for 5,000 gallons of water every month from the Louisville Water Company—or approximately 164 gallons on a daily basis. About 140 gallons per day of that amount are disposed of as wastewater. MSD charges customers $1.35 to safely treat those daily 140 gallons of wastewater and return them to the water table—24/7, every day of the year.

Moreover, MSD maintains 3,300 miles of collection pipe; and, hundreds of miles of channels, streams, creeks and ditches each day. Added to that are the 29 miles of levee and floodwall, 315 floodgates, 79 floodwall closures and 16 pump stations to protect Louisville Metro from flooding. We charge each household only 27 cents per day for those services.

There is a perception that wastewater and flood protection services are generally inexpensive. Unfortunately, that is not the case, as ratepayer fees are necessary to cover daily operating and maintenance expenses, and to fund long-term capital investments for wastewater and flood protection systems, either directly or through paying the interest on outstanding Revenue Bonds.

Projected 2016 NACWA Average Monthly Residential Wastewater Bill (Chart 3)

Based on 5,000 Gallons as of January 1, 2016



Senior citizens who are age 65 or older, have a gross annual household income of $35,000 or less and are both Louisville Water Company and MSD customers may request an application for a 30 percent discount on wastewater charges and the EPA surcharge through MSD's website, LouisvilleMSD.org, or by calling Customer Relations at 502.587.0603.

* Cities with consent decrees.

Based on information collected as of January 1, 2016, by the National Association of Clean Water Agencies (NACWA), MSD's wastewater bill of $41.02 is $0.02 higher than the national average. Nationally, the average wastewater bill is estimated to increase by 5 percent during the next year.

The Environmental Protection Agency (EPA) has established affordability guidelines for the cost of sewer services based on the Medium Household Income (MHI) of the service area. According to the EPA, a wastewater rate of 1 percent of MHI is considered low while a rate of 2 percent is considered high. Based on the MHI within Jefferson County, MSD's rate is 1.04 percent and remains in the low category.

As a percentage of household income, U.S. households pay far less for wastewater services than any other developed country, as cited by the EPA.

Looking to the Future

As MSD is past the midpoint of our Consent Decree, we shift our gaze to a broader focus—of service to our community. Our transformation is far from complete, but we are on the path to setting a national standard for best practices in offering vital services that benefit the community and the environment.

A Plan for the Future

MSD revenue—which is tied to the amount of customer water consumption—is not keeping pace with our growing community. Over the past three decades, our customer base has increased by almost 50 percent while total community water consumption has remained generally flat. As a result of these funding limitations, we have used a band-aid approach to system repairs rather than permanent fixes.

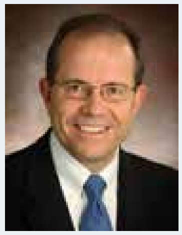
To better address this situation, MSD has developed a data-driven comprehensive “Critical Repair & Reinvestment Plan,” which assesses the condition of our vital infrastructure and the cost to fund necessary repairs. Meeting the critical public health and safety needs identified by the plan is estimated at $4.3 billion during the next two decades.

Investment must be made in the aging floodwalls and levees that hold back the Ohio River, the wastewater facilities that keep sewage out of local waterways, and the drainage system that controls inland flooding. MSD is ready to engage in community conversations to balance the risks along with a financially achievable plan to address the needs for these vital services.

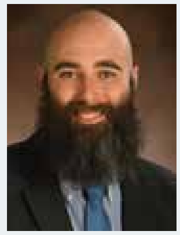
What began as an agency with a singular focus, on wastewater treatment, is transforming to a broader vision of achieving safe, clean waterways for our community.

MSD Board

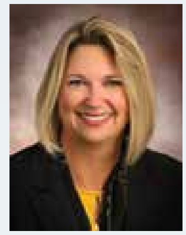
An eight-member citizen Board, which is appointed by the Louisville Metro Mayor, governs MSD's budget, rates, policies and initiatives. These members—who serve three-year overlapping terms—are eligible for reappointment. Each member represents a different state senatorial district in Louisville Metro. The Board holds one regular meeting the fourth Monday of each month, and committees meet as necessary.



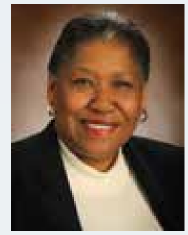
Daniel Arbough
Vice Chair
19th Senatorial District
Independent



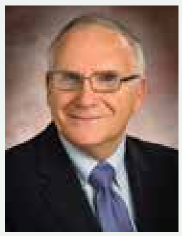
Andrew Bailey
24th Senatorial District
Democrat



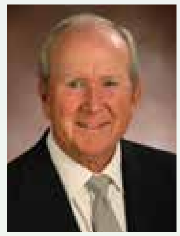
Cynthia Caudill
Chair
38th Senatorial District
Democrat



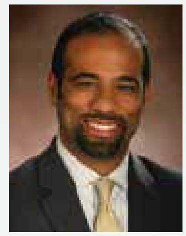
Joyce Horton Mott
33rd Senatorial District
Democrat



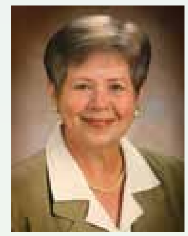
John Phelps
35th Senatorial District
Democrat



JT Sims
36th Senatorial District
Republican



Jason C. Williams
26th Senatorial District
Democrat



Yvonne Wells-Hatfield
37th Senatorial District
Republican

Executive Leadership Team

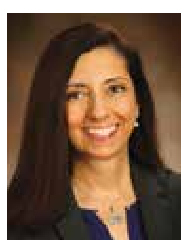
On July 21, 2015, Louisville Metro Mayor Greg Fischer appointed James A. "Tony" Parrott as Executive Director of MSD. Parrott came to Louisville from Cincinnati where he served as Executive Director of Greater Cincinnati Water Works and Metropolitan Sewer District of Greater Cincinnati. Parrott replaced Greg Heitzman who retired in September 2015, after 30 years of service to Louisville Water and more than three years at MSD.

James A. Parrott
Executive Director

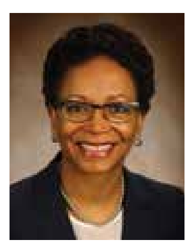
W. Brian Bingham
Chief of Operations

J. Chad Collier
Chief Financial Officer and Secretary/Treasurer

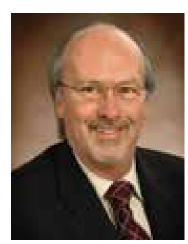
Angela L. Akridge
Chief Engineer



Lynne A. Fleming
Human Resources Director



Paula Middleton Purifoy
General Counsel and Legal Director



Mark Thomas Luckett
One Water Chief Information Officer

Louisville and Jefferson County Metropolitan Sewer District
Annual Financial Report FY 2016

Prepared by MSD Finance Department
J. Chad Collier, Chief Financial Officer and Secretary/Treasurer
Bradley S. Good, Controller

msd
Safe, clean waterways

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LouisvilleMSD.org
24/7 Customer Relations 502.587.0603

LouisvilleMSD

(1,000/01-2017)