



2021 Annual Financial Report
Fiscal Year Ended June 30, 2021



Our Vision

The innovative regional utility for safe, clean waterways.

Our Mission

Provide quality wastewater, stormwater and flood protection services to protect public health and safety through sustainable solutions, fiscal stewardship and strategic partnerships.

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About this Report

The Popular Annual Financial Report (PAFR) is prepared to provide readers an overview of Louisville and Jefferson County Metropolitan Sewer District's purpose and a snapshot of our most recent fiscal year ended June 30, 2021. The financial information contained herein is summarized from our Annual Comprehensive Financial Report published on October 28, 2021.

The Annual Comprehensive Financial Report is prepared in accordance with Generally Accepted Accounting Principles (GAAP) and includes audited financial statements. Both reports are available online at louisvillemsd.org.

To Our Community

Rising to the Challenge

In a time that will go down in history as one of our country's most challenging periods for a number of reasons, we are proud to report that throughout fiscal year 2021, MSD remained solid and steadfast in delivering top quality wastewater, stormwater and flood protection services to our customers.

We moved into this fiscal year during the peak of the COVID-19 pandemic and in doing so we approached our annual budget in the most fiscally responsible manner possible. MSD required all divisions to plan reduced or flat budgets for the year and we eliminated 66 vacant positions to save approximately \$5.6 million. We combed through our budget to hold the line on costs in order to minimize, as much as possible, any rate increase during such a difficult environment.

To allow MSD to continue to meet our federal consent decree requirements, our bond obligations, and the ongoing needs of maintaining and operating our system, our board enacted a measured \$2.98 average monthly rate increase for FY21. At the same time, recognizing the financial difficulties many have faced throughout the pandemic, we implemented our Emergency Wastewater Rate Assistance Program for customers who need help paying sewer bills.

In the context of the pandemic changing daily life for every resident, MSD's focus on maintaining our services at the highest level possible while managing aging infrastructure could not waver. We have shared with the community for several years now the ongoing challenges of wastewater, stormwater or flood protection assets that have outlived their useful life—many dating back a century or more. MSD continues to rise to meet these

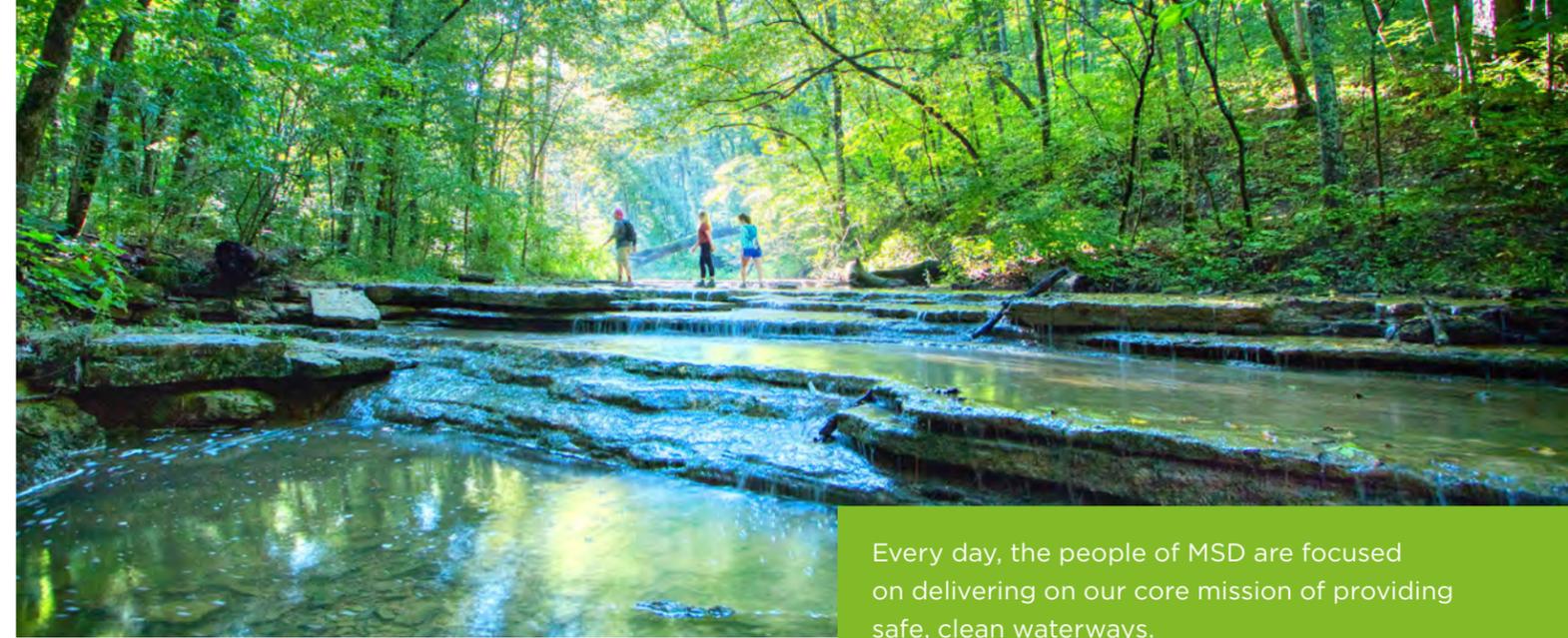
challenges as they occur, and this fiscal year saw MSD responding to infrastructure failures such as sewer cave-ins or collapses in many corners of the community. Large underground brick sewer lines, some built as early as the mid 1800s, required repair and rehabilitation in several high-traffic areas, including West Broadway, East Broadway, East Liberty Street, Baxter Avenue, Cherokee Parkway and Story Avenue.

While repair and refurbishment of infrastructure is inevitable and increasing, this year also saw some good news related to the financing of major improvement projects to help us make big strides in updating the system. First, MSD renegotiated our Consent Decree with federal regulators. This will allow us to have more local control in decision-making about needed capital improvements and will allow some critical infrastructure improvement projects to begin several years sooner than originally planned.

At MSD's Morris Forman Water Quality Treatment Center, a \$97 million U.S. Environmental Protection Agency loan will finance more than half of the cost of upgrading biosolids processing with state-of-the-art improvements, while creating jobs, improving the environment and reducing financing cost.

In addition, the U.S. Army Corps of Engineers this year completed its report on upgrading the region's 1950s-era flood protection system. This report will be a linchpin in MSD's efforts to secure more than \$100 million in federal funds from the recently passed federal bipartisan infrastructure bill to repair and rehabilitate 14 flood pumping stations, and make improvements to floodwalls, floodgates and road-closure structures.

One of MSD's largest capital projects already underway made great strides this fiscal year, as well—but you may never see it. That's because the Waterway Protection Tunnel is more than 18 stories underground. It reached



Turkey Run

Every day, the people of MSD are focused on delivering on our core mission of providing safe, clean waterways.

a major milestone as "Bumblebee," the tunnel-boring machine, completed its four-mile journey when it broke through at the tunnel's terminus. The Waterway Protection Tunnel will store up to 55 million gallons of combined stormwater and wastewater, preventing sewer overflows during periods of heavy rain.

While we always keep a watchful eye on our facilities and systems, MSD has also proactively looked outward—to support the community in the best way we can. This marked the first full year of MSD's renewed industry-leading supplier diversity program. For construction-related services valued at \$150,000 or greater, we've increased goals of inclusiveness for minority- and women-owned businesses as we renew our commitment to equity, justice and transparency in how we serve our customers.

This past year we also launched MSD's Community Benefits Program to embed social responsibility in our outsourced construction and professional services contracts. With construction projects over \$2 million, or professional service contracts over \$200,000, MSD now encourages contractors to submit "Community Benefits Commitments" they will pursue if awarded the project. These can include charitable contributions, volunteer

hours, or in-kind services to area nonprofits or schools. We're already seeing great outcomes across many neighborhoods as we forge partnerships with firms that have strong commitments to the local community.

Every day, the people of MSD are focused on delivering on our core mission of providing safe, clean waterways. And today, as the region faces many challenges, we know that our work also contributes to a larger purpose: a triple bottom line that includes environmental, economic and social results that together build a stronger community.



James A. Parrott
Executive Director
Secretary/Treasurer



Marita Willis
Chair



Ohio River

Enhancing Quality of Life through Our Core Services

Wastewater Collection and Treatment

MSD employees serve our communities by providing high-quality wastewater collection and treatment for Jefferson County and portions of Bullitt and Oldham counties in Kentucky. The MSD Collection System operates beneath your feet. The system transports wastewater—and in older sections of our city, it also carries rainwater—to one of our Water Quality Treatment Centers. Our service area generates about 155 million gallons of wastewater daily that MSD cleans and returns to our waterways.

Louisville MSD's employees provide wastewater management, drainage and flood protection services across the 376 square miles of Louisville Metro, and wastewater service in portions of Bullitt and Oldham counties.



Floyds Fork Water Quality Treatment Center

Flood Protection

MSD maintains Louisville Metro's Ohio River Flood Protection System—keeping the river at bay and out of the city. The system protects more than 200,000 people, 137,000 structures, and \$34 billion in property throughout 110 square miles of Louisville Metro. It includes 26.1 miles of floodwall and earthen levee, 16 flood pumping stations, nearly 150 floodgates and 79 floodwall closures.

Stormwater and Drainage Management

MSD crews perform routine and preventive maintenance for the 376-square mile stormwater drainage system in Louisville* that moves stormwater as quickly 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.



Pond Creek Flood Pump Station

We work to enhance community health and safety by:

- improving water quality in our streams and river
- nurturing a green environment
- supporting a growing community

**The cities of Anchorage, Jeffersontown, St. Matthews and Shively provide drainage services to residents and businesses in their respective municipalities.*

FY 2021 Activity

The Fiscal Year (FY) 2021 was a breakthrough period for Louisville MSD, both literally and figuratively, despite the challenges of operating during the COVID-19 pandemic.

On the literal side, the tunnel boring machine “Bumblebee” completed its four-mile-long, 200-foot deep, 22-foot diameter path from Rowan and 11th streets by breaking through the bedrock face of a retrieval shaft near Lexington Road and Grinstead Drive on September 22, 2020. More than 625,000 tons of rock were removed while completing the path for our Waterway Protection Tunnel.

The tunnel project, a critical element of our effort to reduce sewer overflows, then shifted to installing a 12-inch concrete lining and the project is scheduled for completion by the end of 2022.

The figurative breakthroughs include a list of equally solid milestones. For example, FY21 was the first full fiscal year under the five-year Blueprint 2025 strategic plan to realize the MSD vision of being *the innovative regional utility for safe, clean waterways by applying sustainable solutions, fiscal stewardship and strategic partnerships.*

MSD’s team of dedicated engineers and construction contractors work to complete the concrete lining for the agency’s largest public infrastructure project to date—the Waterway Protection Tunnel.



Amended Consent Decree

Perhaps the most important breakthrough was the renegotiation with the U.S. Environmental Protection Agency of our longstanding consent decree. Since 2005, the decree required us to concentrate most of our capital program on reducing combined sewer overflows and sanitary sewer overflows. Other needs of our aging infrastructure went largely unaddressed due to a lack of funding. The amended consent decree contains three new critical elements:

1. CSO/SSO reduction folds into a broader capital projects list that includes the needs of all three core functions: wastewater treatment, flood protection and drainage.
2. The deadline for completing the planned improvements is extended to 2035, adding 11 years to the prior agreement.
3. Following the newly created Asset Management Plan, operating, maintaining, and upgrading plants and equipment is a systemic process. The plan intends to yield a nearly real-time view of assets’ age, condition and failure risk to make informed investment decisions.

Regionalization

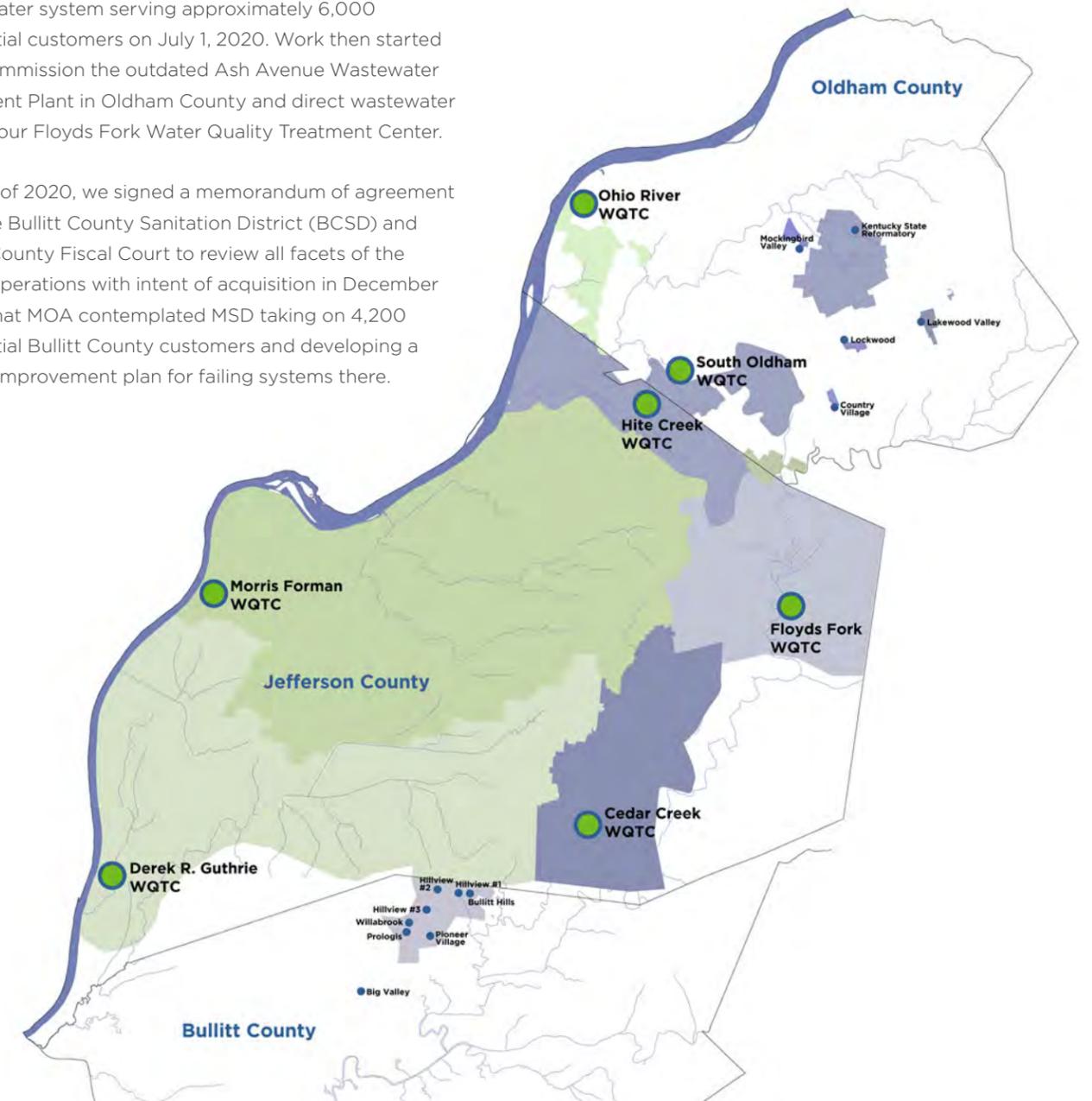
Watersheds know no political or jurisdictional boundaries. For that reason, MSD is moving forward with a holistic approach to wastewater management, bringing economies of scale and making investments and improvements that benefit water quality in our region and beyond.

We opened fiscal 2021 by officially taking charge of the Oldham County Environmental Authority, OCEA, wastewater system serving approximately 6,000 residential customers on July 1, 2020. Work then started to decommission the outdated Ash Avenue Wastewater Treatment Plant in Oldham County and direct wastewater flow to our Floyds Fork Water Quality Treatment Center.

In June of 2020, we signed a memorandum of agreement with the Bullitt County Sanitation District (BCSD) and Bullitt County Fiscal Court to review all facets of the BCSD operations with intent of acquisition in December 2021. That MOA contemplated MSD taking on 4,200 residential Bullitt County customers and developing a capital improvement plan for failing systems there.

Louisville MSD Operating Area

- Regional Water Quality Treatment Centers
- Small Package Treatment Centers



Equity

Fiscal 2021 began as Jefferson Square Park, just one block away from the MSD main office, was the main staging area of a yearlong period of protests and other civil unrest within the Louisville community and our nation.

Louisville MSD, long a proponent for equity, issued a statement calling for “a community-wide dialogue about race that is honest and productive and moves beyond words to actions that make immediate and long-term differences.”

That was the backdrop as MSD marked the 35th year of our Supplier Diversity program, whose goal is to award at least 18 percent of construction-related projects valued at \$150,000 or more to qualified African American vendors. In addition, Louisville Mayor Greg Fischer, noting MSD’s equity track record, appointed executive director Tony Parrott to co-chair a citywide Equity in Contracting and Procurement Task Force.

The task force’s job is to equitably include businesses owned by minority, female, differently-abled and LGBTQ persons in contracting for an estimated \$5 billion in public and private capital infrastructure investment over the next five years. Before the fiscal year began, we filled the newly established Equity and Diversity Officer position by hiring longtime Louisville Metro Government executive Kellie Watson.



COVID-19

On March 16, 2020, MSD asked employees who could perform their jobs remotely to begin doing so to stem the spread of the emerging Coronavirus pandemic. No one knew then that the telework plan would extend through the rest of the fiscal year and beyond.

MSD implemented extensive daily sanitizing, social distancing, and masking requirements to protect workers at our facilities. Employees were urged and given time off to get tested for COVID-19 and vaccinate against the virus. All were kept informed through twice-weekly video updates from the executive director along with timely email, intranet and newsletter communications from Human Resources.



Meanwhile, MSD helped track the spread of COVID-19 by collecting wastewater samples from all geographic areas of Jefferson County, allowing University of Louisville scientists and others to track the spread of the virus through the community before detection in patient test results.

The financial disruption caused by COVID-19 left thousands of our customers unable to pay their wastewater and other utility bills. MSD and Louisville Water Company responded by suspending non-payment service cutoffs and establishing an Emergency Wastewater Assistance Program that provided discounts to low-income residential customers. We also contributed to a fund that provided water bill credits of up to \$500 to residential customers suffering financial hardship.



Harrods Creek

Balance Sheet

Condensed Statement of Net Position (dollars in thousands)

	FY21	FY20	FY19
ASSETS			
Unrestricted Current Assets	143,541	136,424	116,928
Restricted Current Assets	21,181	17,776	52,520
Non-current Assets	109,291	109,354	108,322
Capital Assets	3,458,906	3,302,757	3,118,659
Total Assets	3,732,919	3,566,311	3,396,429
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Outflow - Pension	25,932	31,784	26,931
Deferred Outflow - OPEB	21,962	14,331	10,571
Deferred Outflow - Derivative Instrument	8,541	20,822	-
Deferred Outflow - Loss on Refunding	24,549	12,830	14,516
Total Deferred Outflows of Resources	80,984	79,767	52,018
LIABILITIES			
Current Liabilities	29,099	24,176	18,168
Current Liabilities from Restricted Assets	118,469	105,856	95,537
Non-current Liabilities	2,808,293	2,702,796	2,551,235
Total Liabilities	2,955,861	2,832,828	2,664,940
DEFERRED INFLOWS OF RESOURCES			
Deferred Inflow - Pension	-	2,581	3,198
Deferred Inflow - OPEB	7,420	10,609	5,780
Other Deferred Inflows	2,857	3,330	3,977
Total Deferred Inflows of Resources	10,277	16,520	12,955
NET POSITION			
Net Investment in Capital Assets	762,848	684,412	672,304
Restricted	84,429	80,421	81,207
Unrestricted	488	31,897	17,041
Total Net Position	847,765	796,730	770,552

Highlights

Total assets and deferred outflows of resources increased \$167.8 million, or 4.6%, in fiscal 2021.

Total liabilities and deferred inflows of resources increased by \$116.7 million in fiscal 2021. Non-current liabilities account for most of this growth with \$101 million in additional long-term debt outstanding at the end of the year.

The largest portion of MSD's net position is its net investment in capital assets. Net investment in capital assets increased \$78.4 million in fiscal 2021.

The financial information included is derived from the Annual Comprehensive Report in conformity with Generally Accepted Account Principles (GAAP).

Highlights

Sewer and Drainage Service Charge revenue increased \$10.3 million in fiscal 2021 as a result of a 5% rate increase that occurred on August 1, 2020.

Total Operating expenses were \$838 thousand lower than fiscal year 2020 largely due to tight operating budget controls put in place to address COVID-related uncertainties.

Income Statement

Condensed Statements of Revenues, Expenses & Changes in Net Position (dollars in thousands)

	FY21	FY20	FY19
OPERATING REVENUES			
Wastewater Service Charges	245,802	237,807	219,467
Drainage Service Charges	79,915	75,052	69,706
Other Operating Income	3,701	6,198	5,195
Total Operating Revenues	329,418	319,057	294,368
NON-OPERATING REVENUES			
Gain or Loss Disposal of Assets	(21)	(15,008)	15
Investment Income	12,175	15,600	18,677
Total Non-Operating Revenues	12,154	592	18,692
OPERATING EXPENSES			
Service and Administrative Costs	109,741	110,302	103,699
GASB 68 Pension/GASB 75 OPEB Actuarial Expense	18,547	17,826	12,243
Depreciation and Amortization	97,874	98,872	87,882
Total Operating Expenses	226,162	227,000	203,824
NON-OPERATING EXPENSES			
Interest Expense	103,915	100,387	96,214
Amortization	(14,322)	(10,284)	(11,527)
Change in Fair Value - Derivative Instruments	(8,796)	(812)	13,597
Total Non-Operating Expenses	80,797	89,291	98,284
INCOME BEFORE CAPITAL GRANTS & CONTRIBUTIONS	34,613	3,358	10,952
Capital Grants and Contributions	16,422	9,085	50,926
Change In Net Position	51,035	12,443	61,878
Net Position - Beginning of Year	796,730	770,552	708,674
Effect of OCEA Merger	-	13,735	-
Net Position - End of Year	847,765	796,730	770,552

Cash Flow Statement

Condensed Statements of Cash Flows (dollars in thousands)

	FY21	FY20	FY19
Cash Flows from Operating Activities	224,645	214,052	189,618
Cash Flows from Capital and Related Financing Activities	(211,694)	(231,573)	(245,133)
Cash Flows from Investing Activities	(53,782)	93,525	40,666
Net Increase (Decrease) In Cash and Cash Equivalents	(40,831)	76,004	(14,849)

Cash and Cash Equivalents Beginning of Year	142,817	66,813	81,662
Cash and Cash Equivalents at End of Year	101,986	142,817	66,813

Highlights

Cash flows from operating activities increased as revenue and customer receipts grew.

Cash used by financing activities in fiscal 2021 decreased primarily as a result of lower spending on capital assets.

Cash provided by investing activities in fiscal 2021 decreased as MSD reinvested funds held in money market accounts at June 30, 2020.

Continual improvement of the environmental quality of our waterways through maintaining our infrastructure and collaboration with the community is one of MSD's core values.



Harrods Creek

Credit Rating

A credit rating is an independent evaluation of an organization's credit risk and serves as a predictive indicator of their ability to repay debt. A strong credit rating allows MSD to obtain lower interest rates when we borrow money. Lower interest rates reduce our cost of borrowing over the lifetime of the debt.

In FY21, 84% of MSD's capital program was financed with debt, which makes maintaining or improving our credit ratings a key objective of our financial plan. MSD's debt is rated by Moody's, S&P and Fitch rating agencies. Our ratings have remained stable over the last three fiscal years.

	FY21	FY20	FY19
Moody's	Aa3	Aa3	Aa3
Standard & Poor's (S&P)	AA	AA	AA
Fitch	AA-	AA-	AA-

Affordability

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. EPA considers a wastewater rate of 1% of MHI low while a rate of 2% is considered high. Based on the MHI within Jefferson County, MSD's annual wastewater rate is 1.16% of MHI and remains in the low category.

	FY21
Average Monthly Sewer Bill	\$51.45
Sewer Cost per Day	\$1.69
Sewer Cost per Gallon	\$0.01
Annual Sewer Cost as a % of Louisville Median Household Income	1.16%
Average Monthly Drainage Bill	\$11.11
Drainage Cost per Day	\$0.37



Eastern Tiger Salamander

Looking to the Future

MSD's transformation to be the innovative regional utility for safe, clean waterways continues as we seek to provide award-winning and nationally recognized services and strive to earn the community's trust as a steward for healthy environments in which we all live, work and play.

Future Major Capital Projects

Morris Forman Water Quality Treatment Center

\$197.8 million upgrade will replace an outdated biosolids processing system to handle greater volume and reduce pollutants discharged to the Ohio River

Completion is scheduled in 2030

Paddy's Run Pump Station

\$115 million replacement project to upgrade protection from flooding and combined sewer overflows

Completion is scheduled for 2026

Interceptor Rehabilitation

\$70 million effort to refurbish critical large sewer lines

Completion is scheduled for 2025

Annual System Improvements

At least \$25 million through the year 2035



Eastern Box Turtle



Crews celebrate Bumblebee's 4-mile journey to breakthrough the terminus shaft at Lexington and Grinstead Drive on September 22, 2020.

Our 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



Andrew Bailey



Keith L. Jackson



Ricky Mason



JT Sims



Marita Willis
Chair

Executive Leadership Team

James A. “Tony” Parrott serves as the Executive Director and Secretary/Treasurer of Louisville MSD providing executive leadership, strategic direction, and management ensuring implementation of MSD's core values and mission—safe, clean waterways. He leads and manages executive staff to deliver wastewater, stormwater and

flood protection services to the community. He provides leadership for One Water Partnership with Louisville Water Company. The Executive Director and Secretary/Treasurer reports to the Board of the Metropolitan Sewer District and is appointed by the Louisville Metro Mayor. Likewise, the Chief Engineer is appointed by the Mayor.



James A. Parrott
Executive Director
Secretary/Treasurer



Angela L. Akridge
Chief Strategy
Officer



Paul Bagley
Chief Information
Officer
(Effective 02/27/21)



W. Brian Bingham
Chief Operations
Officer



Lynn Fleming
Human
Resources
Director



Brad Good
Chief Financial
Officer



David Johnson, PE
Chief Engineer



René Lindsay
One Water Chief
Procurement
Officer



**Mark Thomas
Lockett**
Chief One Water
Information
Officer
(Retired 04/01/21)



**Paula Middleton
Purifoy**
General Counsel



Kimberly Reed
Chief Innovation
Officer



Kellie S. Watson
Equity and
Compliance
Officer



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