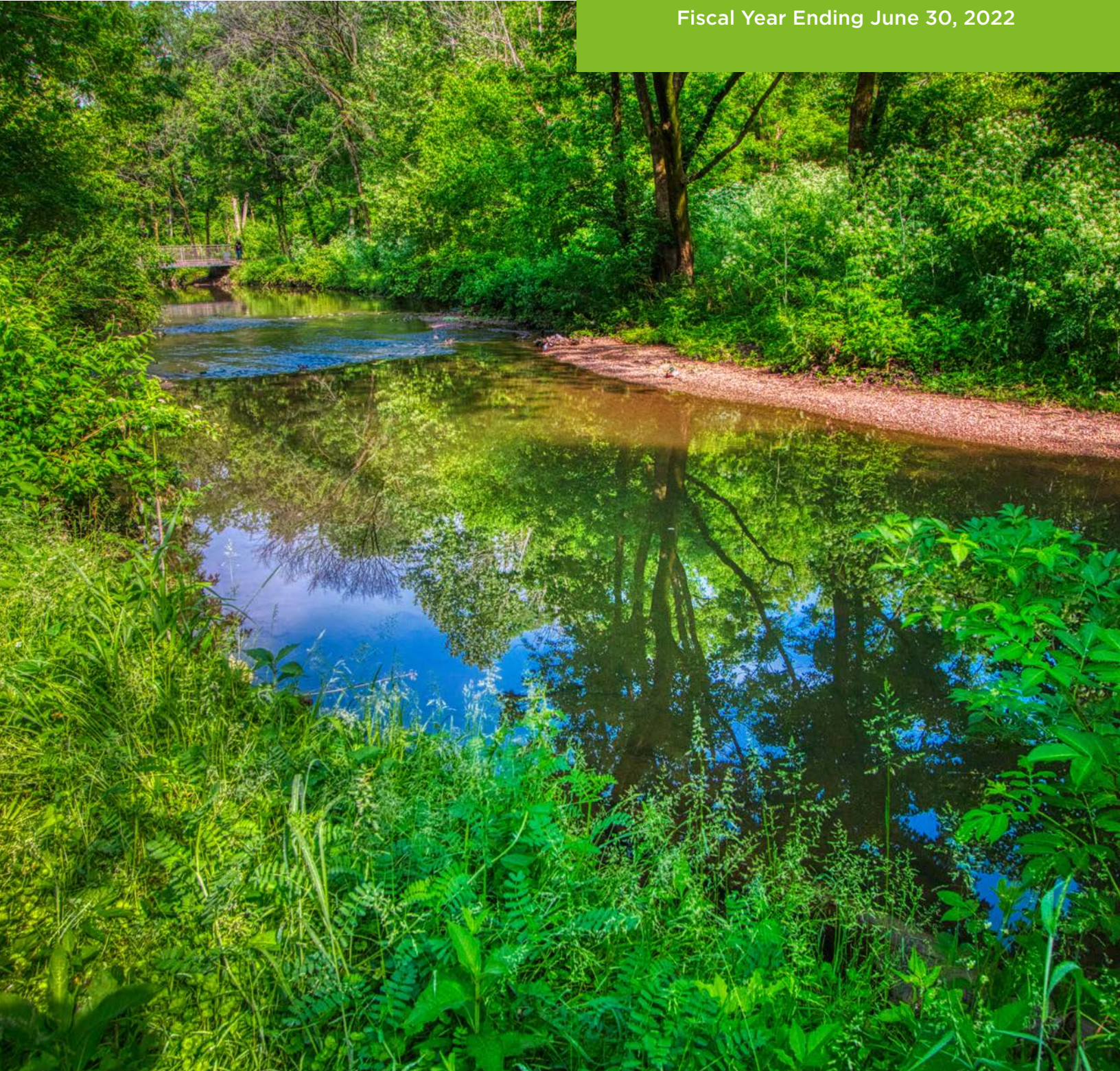




Popular Annual Financial Report  
Fiscal Year Ending June 30, 2022





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.

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, 2022. The financial information contained herein is summarized from our Annual Comprehensive Financial Report published on October 24, 2022. The Annual Comprehensive Financial Report is prepared in accordance with Generally Accepted Accounting Principles (GAAP) and includes audited financial statements. The Annual Comprehensive Financial Report is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of the operations of MSD. Both reports are available online at [louisvillemsd.org](http://louisvillemsd.org).

Table of Contents

Letter To Our Community.....4

Our Core Services .....6

FY 2022 Activity .....8

Condensed Statement of Net Position .....12

Condensed Statement of Revenues,  
Expenses & Changes in Net Position .....13

Cash Flow Statement .....15

Credit Rating .....15

Affordability .....15

Future Major Capital Projects .....16

Our Board.....18

Executive Leadership Team.....19





*Beargrass Creek*

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

# One Organization, Three Utilities For Our Customers

On the heels of a lingering pandemic, our country continues to manage through labor shortages, supply chain issues, and marked inflation. Despite these challenges, along with the added strains of aging underground infrastructure and increasing extreme weather events, MSD is pleased with the progress and results we have provided for our community during fiscal year 2021/22. We continue to provide greater and greater value, with growing efficiencies, across our customer base.

MSD is a unique utility because we operate as three utilities in one, providing wastewater treatment, stormwater management, and flood protection. In many communities, multiple service agencies perform those duties, yet MSD is responsible for all three functions for hundreds of thousands of households. As one agency, we are able to share “back office” and administrative duties across these three areas in order to efficiently and professionally provide high-quality service and response to our customers.

Large portions of our budget continue to go to system improvements and projects designed to meet the environmental requirements of our federal consent decree to reduce sewer overflows that occur during periods of heavy rain. We were proud this year to complete and put into service one of our largest capital projects ever: the Waterway Protection Tunnel, a four-mile long wastewater and stormwater storage facility built 18 stories underground. The tunnel now joins our network of storage basins and pipes that, together, store nearly 180 million gallons of combined wastewater and stormwater during heavy rain events – preventing it from polluting our river, creeks, and streams.

MSD also must face head-on the challenge of aging infrastructure. Across our community, we continue to see underground pipes – some built 100 years ago or more – that are at risk or that fail and require emergency repair. Similarly, there are vital MSD facilities that have reached the end of their functional lifespan. Critical capital improvements will cost more than \$1 billion over five years, so to better accommodate these projects while still continuing to provide our core services, MSD is pursuing a number of innovative financing options. The Water Infrastructure Finance and Innovation Act (WIFIA) low-interest loan program will enable MSD to replace and upgrade the biosolids processing system at

Morris Forman Water Quality Treatment Center, and we’re actively pursuing other new funding programs through The American Rescue Plan as well as innovative tools like climate bonds that help us maximize our budget and resources in serving the community.

This fiscal year also saw a number of positive developments in serving the community. To name just a few:

- MSD expanded our services to portions of Bullitt County, adding to Jefferson and portions of Oldham counties that now comprise our service area and allow us to look holistically at how to best protect the regional watershed while creating operational efficiencies;
- Four of our water quality treatment centers earned Operational Excellence Awards from the Clean Water Professionals of Kentucky and Tennessee;
- We launched the cIAIRity Program, a phased planning and public involvement process to reduce odors that naturally occur with wastewater treatment; and
- We celebrated our Community Benefits program’s milestone of achieving \$2 million generated for nonprofits, neighborhood groups and other grassroots efforts to improve our community.

MSD is pleased to present the following annual report which shows continued strong financial performance, evidenced by a positive balance sheet, rates that remain below many peer communities, and maintaining our quality bond rating, despite the turbulence of the last couple years.

In simplest terms, MSD is providing great value to our customers as *#3UtilitiesInOne* that work for Safe, Clean Waterways across our region.



**James A. Parrott**  
Executive Director  
Secretary/Treasurer



**Marita Willis**  
Chair



# Three Utilities, One Agency

Louisville MSD is three utilities in one agency. While the name Metropolitan Sewer District may prompt people to think of only one of our core services, MSD actually provides three distinct health and safety utility functions that, in many other jurisdictions, are run by different agencies.

## Wastewater Collection and Treatment

Our wastewater collection system conveys the used water from sinks, drains, and toilets in homes and businesses in Jefferson County and portions of Bullitt and Oldham counties. The system of nearly 3,600 miles of pipe sends the dirty water to our Water Quality Treatment Centers, where it is treated and cleaned before being released into local waterways. In older parts of Louisville, the sewer system also takes in rainwater. As a result, about 155 million gallons of wastewater move through the system every day.



*Floyds Fork Water Quality Treatment Center*



*Pond Creek Flood Pump Station*



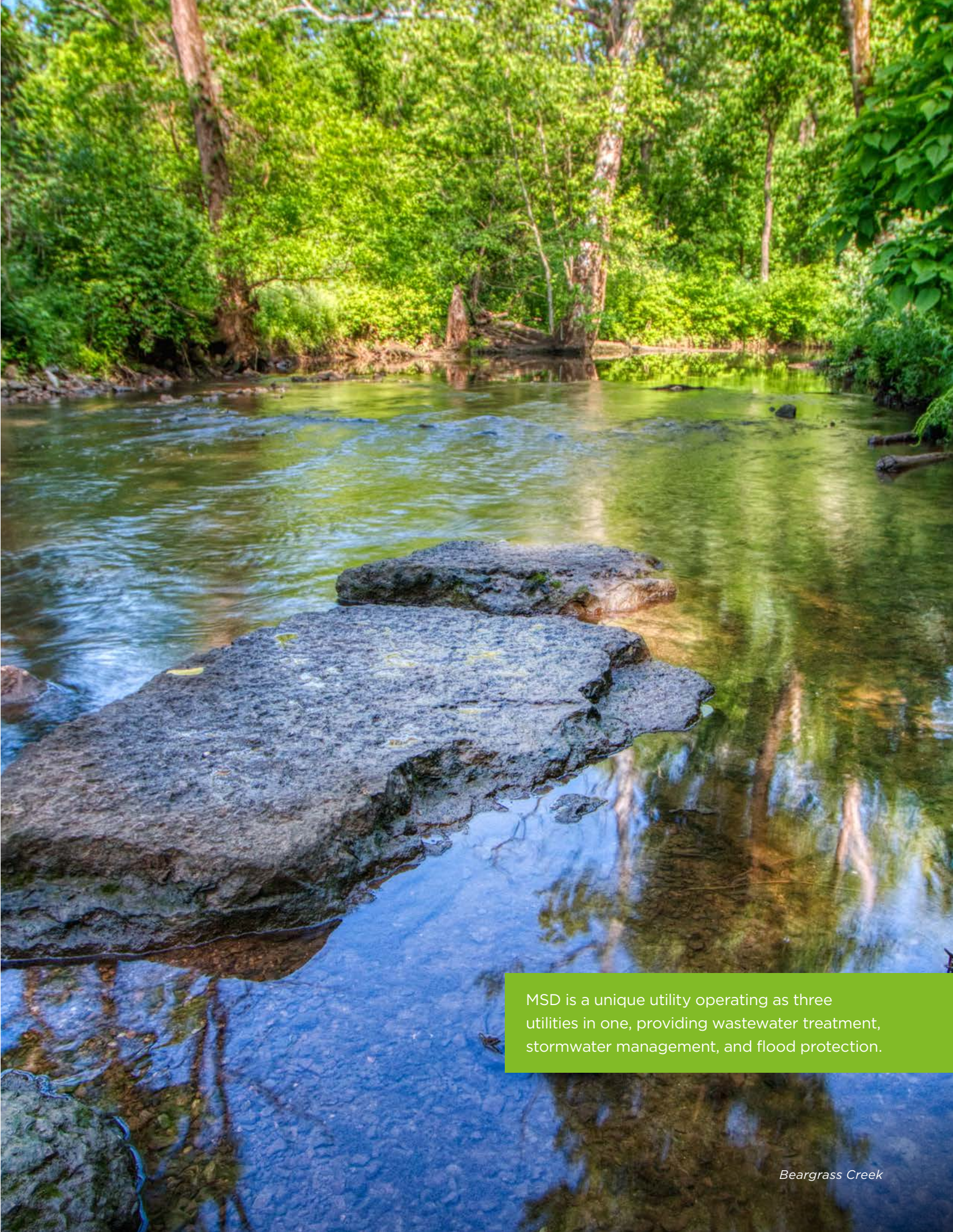
*Stormwater Drainage Basin*

## Flood Protection

MSD was assigned responsibility for Louisville's Ohio River Flood Protection System in 1987, which includes 26.1 miles of floodwalls and earthen levee, 16 flood pumping stations, nearly 150 floodgates, and 79 floodwall closures. These work together to keep the river at bay and out of the city. The Flood Protection System protects more than 200,000 people, 137,000 structures, and \$34 billion in property within 110 square miles of Louisville Metro.

## Stormwater and Drainage Management

The water from rain and snowmelt throughout Louisville Metro doesn't magically evaporate. It must be quickly routed away to prevent flooding. That's where MSD's 376-square-mile stormwater drainage system comes in. We maintain 67,668 catch basins, 19 miles of stream banks and flood protection levees along with numerous drainage channels and ditches. We also monitor for pollutants and remove illegal discharges to the stormwater system.



MSD is a unique utility operating as three utilities in one, providing wastewater treatment, stormwater management, and flood protection.

*Beargrass Creek*





Crews work to complete the 12-inch thick concrete lining of MSD's four-mile long Waterway Protection Tunnel.

## FY 2022 Activity

### Waterway Protection Tunnel Finished

On May 16, 2022, a heavy-duty crane lifted six concrete sections into place to form a 220-ton, 48-foot diameter cap atop the 200-foot-deep shaft that had served as the primary access for workers constructing MSD's Waterway Protection Tunnel since 2018. It was the capstone of the agency's largest ever capital construction project, a four-mile-long, 20-foot diameter tunnel that is 18 stories underground and capable of storing 55 million gallons of stormwater and wastewater.

The Waterway Protection Tunnel and a series of more traditional storage basins, along with inline storage pipes constructed over the past several years, will prevent nearly all the 6.5 billion gallons of combined rainwater and wastewater sewer overflows that previously went into local waterways during a typical year. It will do so by capturing the excess volume and storing it until the rains slow, and there is capacity available in our Water Quality Treatment Centers and sewer lines.

The five-acre site surrounding the work shaft and adjacent pump station will become part of a 22-acre westward expansion of Louisville's world-class Waterfront Park following a donation of the land from MSD to the Waterfront Development Corporation.

### Consent Decree Update

A previously agreed amendment of our consent decree with the U.S. Environmental Protection Agency became official upon a federal judge's signature on September 15, 2022. The main provisions of the amendment extend the deadline for completion of mandated improvements by eleven years to 2035 and allow us to include projects that address the needs of our aging infrastructure in addition to the original focus of reducing combined sewer overflows and sanitary sewer overflows.

That will allow for the acceleration of improvements to the Morris Forman Water Quality Treatment Center, replacing the Paddy's Run Pump Station, rehabilitating interceptor lines, and making general system improvements.

### Bullitt County Acquisition

MSD expanded our regional approach to watershed management on December 1, 2021, when we assumed operation of the newly acquired assets of the Bullitt County Sanitation District, serving 4,200 residential customers.

Some small Bullitt County plants that have served beyond their useful life will be decommissioned, and their volume routed to MSD's larger regional treatment facilities. High on the list is a plan to divert wastewater flow from the former Hunters Hollow Treatment Plant and Big Wood Pump Station to MSD's recently constructed Mud Lane Interceptor sewer line in southern Jefferson County. We are also developing a long-term plan to identify capital improvements or elimination plans for all the wastewater treatment plants within the service area.

### Oldham County

The Bullitt County acquisition south of the original Jefferson County MSD charter continues the regionalization effort begun in July 2020 with the purchase of the Oldham County Environmental Authority wastewater system serving 6,000 customers north of Jefferson County. In Oldham County, work is underway to redirect flow from the outdated Ash Avenue Wastewater Treatment Plant to our Floyds Fork Water Quality Treatment Center in Jefferson County.

This holistic regional approach to watershed management brings economies of scale and provides for investments and improvements that benefit water quality in our region and beyond.

### Climate Bonds

The core of MSD's operational mission has always been green and dedicated to providing safe, clean waterways. This year, the financing of our capital funding also went green. An issue of \$225 million Sewer and Drainage System Revenue Bonds—the Series 2022A Bonds—were officially recognized and issued as Green Bonds – Climate Certified.

Kestrel Verifiers provided the third-party opinion for the 2022A Bonds and noted in their report, "the District demonstrates leadership in integrated water resource management by reducing combined sewer overflows and sanitary sewer overflows to meet Consent Decree obligations and by financing upgrades to the flood control, stormwater, and wastewater systems which integrate nature-based solutions. The bonds align with the Water Infrastructure eligible Sector Criteria under the Climate Bonds Standard."

### Return to Office, Work from Home Policy, Covid Policy

MSD's return to in-person work came, after a couple of false starts, on March 7, 2022, nearly two full years after those employees who could, were told to work remotely to stem the spread of the COVID-19 virus. During the time away, MSD, like many businesses, learned that many of our positions are suitable for regular remote work.

To enhance our status as an employer of choice, we created a Modified Work Schedule and Telework policy. The policy, adopted on December 20, 2021, allows employees to work remotely up to three days per week upon approval of their director or chief, "provided they can carry out the same duties, assignments, and other work obligations at their home or off-site location as they do when working on MSD's premises." There is also a provision allowing for work schedules that begin and end at times that differ from the standard shift schedule subject to management approval.

In preparation for the return, MSD also adopted a Mandatory Vaccination and Medical Testing policy to protect employees' health. The policy, which goes beyond Covid to address any infectious disease outbreak, requires that "all employees and other individuals that work within MSD's workplaces" take advantage of available vaccinations or undergo regular testing.





On May 16, 2022, MSD's largest infrastructure project to date—the Waterway Protection Tunnel—passed a construction milestone with the capping of the working shaft, an essential step allowing operation of the tunnel.

Six pieces of pre-formed concrete weighing a total of 220 tons, forming a 48-foot diameter concrete cap, were put into place by crane. Throughout construction, the working shaft was used to lower both machinery and workers 200 feet down to the worksite.



# Condensed Statement of Net Position

(Dollars in Thousands)

	FY22	FY21	FY20
<b>ASSETS</b>			
Unrestricted Current Assets	153,423	143,541	136,424
Restricted Current Assets	33,735	21,181	17,776
Non-current Assets	389,839	399,583	398,045
Capital Assets	3,293,005	3,168,614	3,014,066
<b>Total Assets</b>	<b>3,870,002</b>	<b>3,732,919</b>	<b>3,566,311</b>

<b>DEFERRED OUTFLOWS OF RESOURCES</b>			
Deferred Outflow - Pension	21,836	25,932	31,784
Deferred Outflow - OPEB	23,447	21,962	14,331
Deferred Outflow - Derivative Instrument	-	8,541	20,822
Deferred Outflow - Loss on Refunding	26,827	24,549	12,830
<b>Total Deferred Outflows of Resources</b>	<b>72,110</b>	<b>80,984</b>	<b>79,767</b>

<b>LIABILITIES</b>			
Current Liabilities	20,395	29,099	24,176
Current Liabilities from Restricted Assets	103,924	118,469	105,856
Non-current Liabilities	2,846,272	2,808,293	2,702,796
<b>Total Liabilities</b>	<b>2,970,591</b>	<b>2,955,861</b>	<b>2,832,828</b>

<b>DEFERRED INFLOWS OF RESOURCES</b>			
Deferred Inflow - Pension	17,811	-	2,581
Deferred Inflow - OPEB	17,068	7,420	10,609
Other Deferred Inflows	13,610	2,857	3,330
<b>Total Deferred Inflows of Resources</b>	<b>48,489</b>	<b>10,277</b>	<b>16,520</b>

<b>NET POSITION</b>			
Net Investment in Capital Assets	850,316	762,848	684,412
Restricted	84,607	84,429	80,421
Unrestricted	(11,891)	488	31,897
<b>Total Net Position</b>	<b>923,032</b>	<b>847,765</b>	<b>796,730</b>

## Highlights

Total assets and deferred outflows increased \$128.2 million, or 3.4%, to \$3.9 billion

Total liabilities and deferred inflows increased \$52.9 million, or 1.8%, to \$3.0 billion.

The largest portion of MSD’s net position is its net investment in capital assets. Net investment in capital assets increased \$87.4 million, or 11.5%, in fiscal 2022.

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

## Highlights

Operating revenues increased by \$35.9 million, or 10.9%, to \$365.3 million primarily due to a 6.9% rate increase effective August 1, 2021 to wastewater and drainage service charges and the acquisition of the Bullitt County Sanitation system on November 30, 2021 which added \$2.2 million in operating revenue to fiscal 2022.

Operating expenses increased by \$5.5 million, or 2.4%, to \$231.6 million primarily due to higher insurance premiums, chemical costs and depreciation and amortization expense. These expenses were partially offset by a reduction in GASB 68 and GASB 75 pension expense.

# Condensed Statement of Revenues, Expenses & Changes in Net Position

(Dollars in Thousands)

	FY22	FY21	FY20
<b>OPERATING REVENUES</b>			
Wastewater Service Charges	270,066	245,802	237,807
Drainage Service Charges	86,804	79,915	75,052
Other Operating Income	8,497	3,701	6,198
<b>Total Operating Revenues</b>	<b>365,367</b>	<b>329,418</b>	<b>319,057</b>

<b>NON-OPERATING REVENUES</b>			
Gain or Loss Disposal of Assets	124	(21)	(15,008)
Investment Income	8,877	12,175	15,600
<b>Total Non-Operating Revenues</b>	<b>9,001</b>	<b>12,154</b>	<b>592</b>

<b>OPERATING EXPENSES</b>			
Service and Administrative Costs	118,978	109,741	110,302
GASB 68 Pension/GASB 75 OPEB Actuarial Expense	8,725	18,547	17,826
Depreciation and Amortization	103,964	97,874	98,872
<b>Total Operating Expenses</b>	<b>231,667</b>	<b>226,162</b>	<b>227,000</b>

<b>NON-OPERATING EXPENSES</b>			
Interest Expense	101,703	103,915	100,387
Amortization	(13,404)	(14,322)	(10,284)
Change in Fair Value - Derivative Instruments	(11,293)	(8,796)	(812)
<b>Total Non-Operating Expenses</b>	<b>77,006</b>	<b>80,797</b>	<b>89,291</b>

<b>NET POSITION</b>			
Income Before Capital Grants & Contributions	65,695	34,613	3,358
Capital Grants and Contributions	9,572	16,422	9,085
Change In Net Position	75,267	51,035	12,443
Net Position - Beginning of Year	847,765	796,730	770,552
Effect of OCEA Merger	-	-	13,735
<b>Net Position - End of Year</b>	<b>923,032</b>	<b>847,765</b>	<b>796,730</b>





Harrods Creek

MSD takes a holistic approach for wastewater treatment and watershed management, benefiting public health and safety across political boundaries.

# Cash Flow Statement

Condensed Statements of Cash Flows (dollars in thousands)

	FY22	FY21	FY20
Cash Flows from Operating Activities	238,339	224,645	214,052
Cash Flows from Capital and Related Financing Activities	(215,036)	(211,694)	(231,573)
Cash Flows from Investing Activities	(53,435)	(53,782)	93,525
Net Increase (Decrease) In Cash and Cash Equivalents	(30,132)	(40,831)	76,004

Cash and Cash Equivalents Beginning of Year	101,986	142,817	66,813
Cash and Cash Equivalents at End of Year	71,854	101,986	142,817

## Credit Rating

A credit rating is an independent evaluation of an organization’s credit risk and serves as a predicative indicator of the 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. 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.

	FY22	FY21	FY20
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. MSD wastewater rates in fiscal year 2022 for Jefferson, Oldham and Bullitt counties were 1.13%, 0.92% and 1.03%, respectively.

Jefferson County	FY22
Average Monthly Sewer Bill	\$54.99
Sewer Cost per Day	\$1.81
Sewer Cost per Gallon	\$0.01
Annual Sewer Cost as a % of Jefferson County Median Household Income	1.13%
Average Monthly Drainage Bill	\$11.88
Drainage Cost per Day	\$0.39

### Highlights

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

Cash used by financing activities in fiscal 2022 increased primarily as a result of higher spending on capital assets.

Cash used by investing activities in fiscal 2022 was flat to fiscal 2021.



# Future Major Capital Projects

## Morris Forman WQTC Investment

The Bio-solids Processing Solution for our Morris Forman Water Quality Treatment Center (WQTC) is a Progressive Design-Build project to provide reliable solids treatment and handling for the next 20 years. The project will:

- increase solids reduction through enhanced anaerobic digestion within existing digesters
- increase digester gas production, allowing for possible recovery/energy production for on-site use
- provide capacity to handle existing Morris Forman WQTC, satellite facilities, and other potential organic waste sources without adding more digester capacity
- provide continuation of sustainable/reliable beneficial reuse of Class A quality bio-solids

The current schedule shows the project reaching substantial completion in August 2026. The estimated project cost is \$244 million.

## Paddy’s Run Pump Station

The Capacity Upgrade project for our Paddy’s Run Flood Pump Station is a Progressive design-build project that includes:

- new pump station with a total pumping capacity of 1,900 million gallons per day
- new flood pumps, motors, and discharge pipes
- installation of all the necessary electrical, mechanical, and instrumentation components to allow the automated operation of the new flood pumps
- required building specifications

The current schedule shows the project reaching substantial completion in December 2026. The estimated project cost is \$233 million.

## Interceptor Rehabilitation

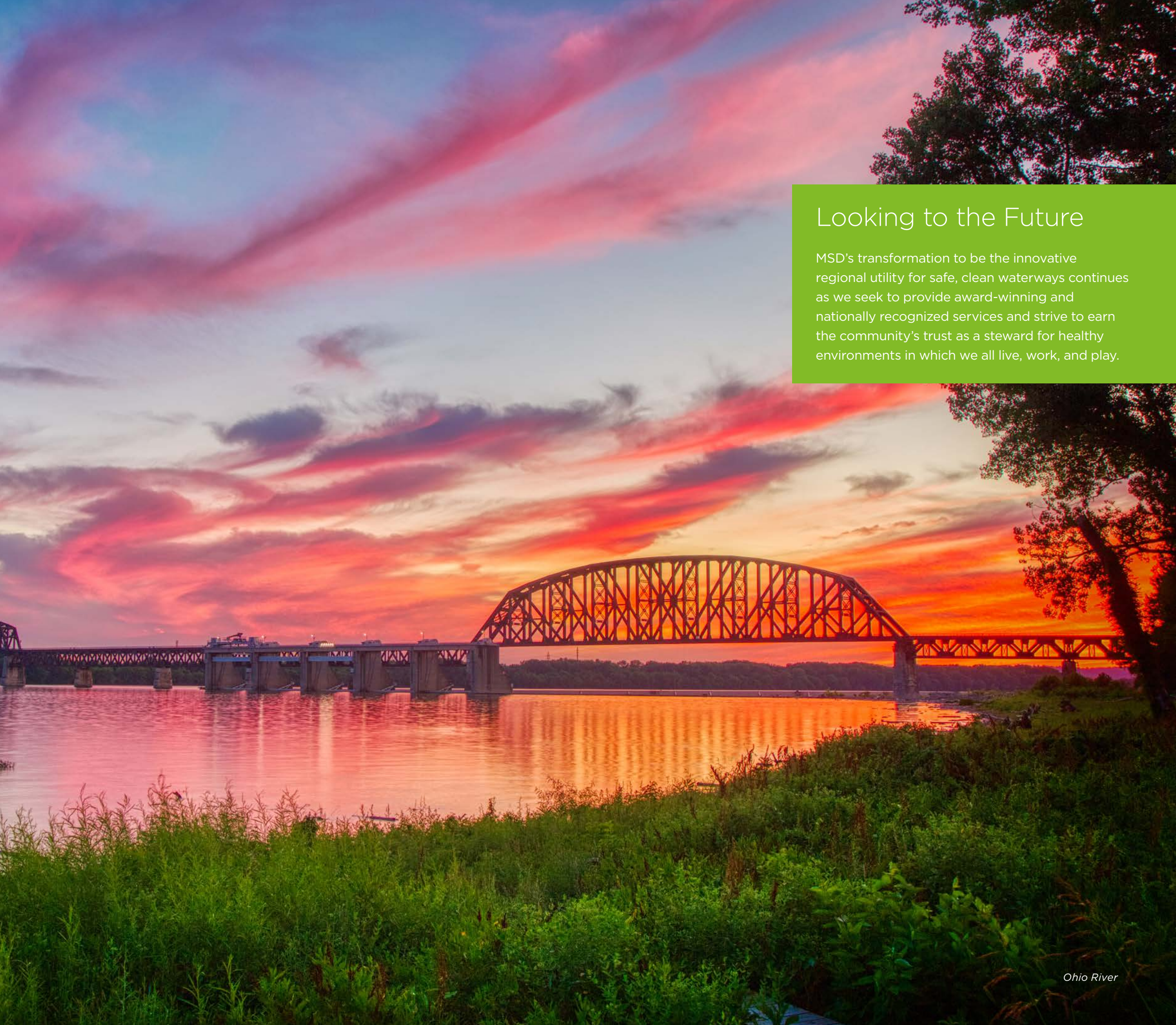
The rehabilitation of our large sewer lines, known as interceptor lines, is a \$70+ million effort to refurbish these pieces of critical infrastructure. The expected completion of this effort is 2025.

## Asset Management

The agency will invest at least \$25 million in asset management through 2035.

## 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.



Ohio River



# 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.



**Rebecca Cox**



**Keith L. Jackson**  
Vice Chair



**Gerald Joiner**



**Ricky Mason**



**Carmen  
Moreno-Rivera**



**John Selent**



**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 the One Water Partnership with the Louisville Water Company. The Executive Director and Secretary/Treasurer reports to the MSD Board 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



**W. Brian Bingham**  
Chief Operations  
Officer



**Lynne Fleming**  
Human Resources  
Director



**Brad Good**  
Chief Financial  
Officer



**David Johnson, PE**  
Chief Engineer



**René Lindsay**  
One Water Chief  
Procurement  
Officer



**Paula Purifoy**  
General Counsel  
and Legal Director



**Kimberly Reed**  
Chief Innovation  
Officer



**Wes Sydnor**  
Chief of  
Government and  
Public Affairs





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