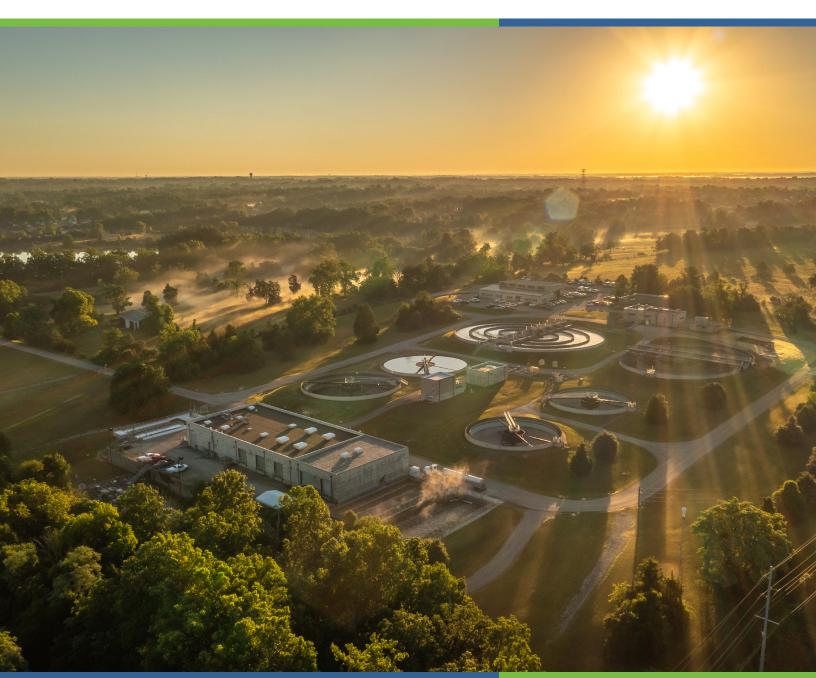
Louisville and Jefferson County Metropolitan Sewer District

ANNUAL COMPREHENSIVE FINANCIAL REPORT

Fiscal Year Ended June 30, 2024





A Component Unit of Louisville Jefferson County Metro Government Commonwealth of Kentucky



ANNUAL COMPREHENSIVE FINANCIAL REPORT

Louisville/Jefferson County Metropolitan Sewer District Louisville, Kentucky

A Component Unit of Louisville/Jefferson County Metro Government Commonwealth of Kentucky

Fiscal Years Ended June 30, 2024
With Comparative Information for Fiscal Year Ended June 30, 2023

Prepared by the Department of Finance Brad Good, Chief Financial Officer Michael Fitzner, Controller

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INTRODUCTORY SECTION (Unaudited)



MSD's Cedar Creek Water Quality Treatment Center



700 West Liberty Street | Louisville, KY 40203-1911 Phone: 502.540.6000 | LouisvilleMSD.org

October 29, 2024

Letter of Transmittal

MSD Board of Directors and Those That We Serve,

On behalf of the Louisville and Jefferson County Metropolitan Sewer District, we are pleased to present the Annual Comprehensive Financial Report for the fiscal year ended June 30, 2024. MSD's financial statements have been prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP). In accordance with Kentucky Revised Statute 65A.030, MSD is required to undergo an annual independent audit of its financial statements.

Responsibility for the accuracy, completeness and fairness of the data presented herein, including all disclosures, rests with MSD. To provide a reasonable basis for making these representations, the management of MSD has established a comprehensive internal control framework that is designed to both protect its assets from loss, theft, or misuse and to compile sufficient reliable information for the preparation of MSD's financial statements in conformity with GAAP. MSD's internal control framework has been designed to provide reasonable, rather than absolute assurance, that the financial statements as of June 30, 2024 and 2023 are free from material misstatement. Reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits derived and (2) the valuation of costs and benefits requires the use of estimates and judgements by management. To the best of our knowledge and belief, the accompanying data 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. All disclosures necessary to enable the reader to understand MSD's financial activities have been included.

GAAP requires that management provide a narrative to accompany the basic financial statements in the form of Management's Discussion and Analysis which is found beginning on page 3. This letter of transmittal is intended to be read in conjunction with that analysis.

Crowe LLP has been retained by MSD to serve as its independent auditors and has issued an unmodified opinion on MSD's financial statements for the years ended June 30, 2024. The independent auditor's report can be found at the beginning of the financial section of this report.

As a recipient of federal funding, MSD is required to undergo a Single Audit in conformity with the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996 and U.S. Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards 2CFR200 (Uniform Guidance). Information related to the Single Audit, including the Schedule of Expenditures of Federal Awards, findings and recommendations and the auditor's reports on internal controls is provided in a separate report.

Profile of MSD

MSD was created in 1946 as a public body corporate and subdivision of the Commonwealth of Kentucky. MSD provides sewer, drainage, and flood protection services within most of Louisville Metro, which comprises all of Jefferson County, Kentucky. In addition, MSD provides sewer service in portions of Oldham County and Bullitt County, Kentucky through Interlocal Agreements. Chapter 76 of the Kentucky Revised Statutes authorizes MSD to construct additions, betterments, and extensions within its service area and to recover the cost of its services in accordance with rate schedules adopted by its Board.

MSD is a component unit of the Louisville/Jefferson County Metro Government. MSD has no special financial relationship with the Louisville Metro Government; however, effective July 1, 2006, MSD began providing free wastewater and drainage services to Louisville Metro Government. The value of these services in fiscal year 2024 was \$7.9 million.

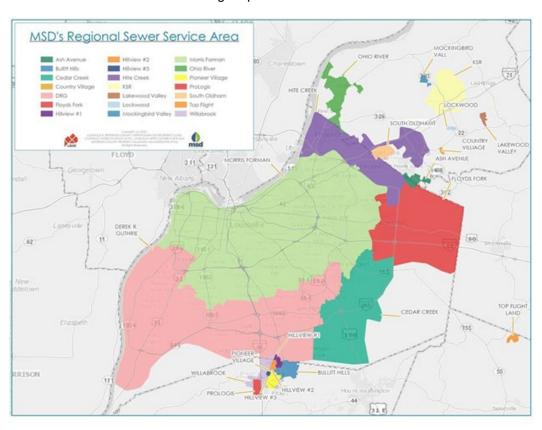
The Louisville Metro Mayor appoints, with the approval of the Louisville Metro Council, members of MSD's governing Board, its Executive Director, Chief Engineer, and Secretary/Treasurer. The Board, which has statutory authority to enter into contracts and agreements, manages MSD's business and activities.

The Board is required to adopt an annual budget before the start of each fiscal year. Management prepares and recommends annual budgets to Board standing committees prior to final approval by the full Board. Annual budgets may be amended using the same process used for adoption of the original budget. No monies may be spent from any source except as provided in the originally adopted or subsequently amended budget. MSD prepares its budgets on a modified accrual basis. A reconciliation for fiscal year 2024 between the budget basis and total expenses reported in the Statements of Revenues, Expenses, and Changes in Net Position is included in the Statistical Section as Schedule 2.

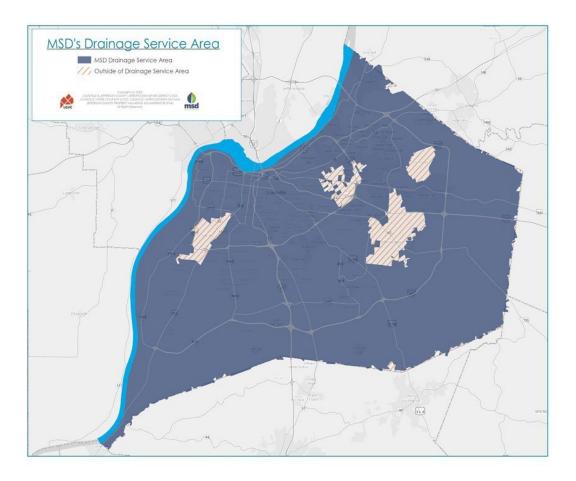
The Board is required by the General Bond Resolution to establish, maintain, and collect rates for each fiscal year sufficient to pay 110% of principal and interest on senior lien bonds, required reserve account deposits, all operating expenses, subordinated debt service, and all charges or liens. Revenue requirements are determined based upon the cash needed to cover the bond resolutions requirements and to cash-fund a portion of the capital budget.

Wastewater and drainage service charges are collected from residential, commercial, and industrial customers within MSD's service area. In fiscal year 2024, MSD provided wastewater services to over 259,000 customer connections and drainage/flood protection services to more than 225,000 customers. As of June 30, 2024, MSD has 755 employees responsible for operating and maintaining over 3,600 miles of sewer, 5 water quality treatment centers, 15 wastewater treatment plants and 26 miles of flood wall.

Wastewater service charges are distributed to respective customer classes based on actual costs incurred to collect and treat wastewater. The following map details the wastewater service area.



Drainage service charges are assessed based on the equivalent service units (ESU) of impervious service for each parcel of property. An ESU is defined by MSD as 2,500 square feet of impervious area. Single-family residential parcels are assessed one ESU. The drainage service charge provides funding for the interior drainage system and the Louisville flood protection system. The following map details the drainage service area.



Local Economic Conditions

Louisville, located in Jefferson County, is the largest city in the Commonwealth of Kentucky and home to the Kentucky Derby and a bourbon-centric tourism industry. The U.S. Census Bureau estimates there were 772 thousand residents in Jefferson County, Kentucky, as of July 1, 2023. This is a decrease of 1.4% from the population estimate base report as of April 1, 2020.

According to the Bureau of Labor Statistics preliminary data, Louisville employment was at 647 thousand jobs in June of 2024 compared to 642 thousand jobs in June 2023, an increase of 0.6%. MSD's employment base has grown 8.4% over the last fiscal year with 755 full time employees at June 30, 2024 compared to 696 full time employees at June 30, 2023. Major employers in the Louisville metropolitan area include United Parcel Service, Norton Healthcare, UofL Health, Jefferson County Public Shcools and Ford Motor Company.

The United States Department of Labor's Bureau of Labor Statistics listed the preliminary unemployment rate for Jefferson County, Kentucky, as 4.4% in June 2024 compared to 3.9% in June of 2023. Additional information on demographic and economic conditions for Louisville can be found in the Statistical Section of this report.

Strategic Planning

In 2019, MSD rolled out our current strategic business plan, branded as "Blueprint 2025". Developed through workshops with staff across all divisions, this plan was designed as a transformative process to enhance organizational performance through the application of Effective Utility Management best practices within every aspect of our internal value chains.

Blueprint 2025 provides a structured approach for MSD's success, positioning the organization to deliver our three core business services to the community by providing clarity for every employee about our vision, mission, and critical success factors. It represents a plan designed to unite us and strengthen our bond as we target specific initiatives and metrics in support of the services provide to the communities we serve.

Organizational performance management involves a comprehensive evaluation of not just "are we doing things right", but rather "are we doing the right things". The main goal of organizational performance management is to drive the achievements of organizational strategies, goals, and objectives by ensuring that divisional, departmental, team and individual performance is aligned with organizational direction. To achieve this lofty goal, MSD developed a "blueprint" for the development, assignment, and performance evaluation of goals which all divisions are required to implement as written.

Application of this organizational performance management framework creates a direct line of sight between employees and organization's the overarching goals and objectives by deploying cascading goals from the organizational goal level to departments, divisions, team, and individual employees. This ensures transparency, focus continued performance improvement on a continual basis, and visibility of how overall organizational strategy execution is being achieved throughout the organization.



Under this framework, performance is assessed at the highest level through organizational goals that apply to all staff. Additional connection is created for non-union staff through division/department, team and individual contributor goals directly aligned to and supporting implementation of the organizational goals.

Fiscal Year 2025 Budgets

MSD's operating budget for fiscal year 2025 totals \$202.6 million. The operating budget provides funding to operate and maintain our wastewater collection & treatment systems along with the drainage and flood protection systems. The operating budget also funds the administrative and support services that are required to operate the utility.

Debt service payments on MSD's outstanding debt will total \$185.3 million for fiscal year 2025. MSD actively manages it debt service obligations by refunding debt to achieve debt service savings when possible and by incorporating innovative financing tools. MSD started a commercial paper program in 2018 to provide interim financing for capital projects. Commercial paper is periodically refinanced with 30-year fixed rate sewer and drainage system revenue bonds. In 2020, MSD secured a \$98 million WIFIA loan from the US EPA. MSD estimates the WIFIA loan will save over \$15 million in financing costs over the life of the loan compared to traditional financing methods. In addition to the low cost, the WIFIA loan provides MSD flexibility in repayment terms and construction scheduling, ensuring that the funding meets MSD's needs throughout the life of the project.

MSD's capital budget totals \$298.8 million for fiscal year 2025. MSD's commitments related to infrastructure rehabilitation and improvement under the Consent Decree and other Kentucky Agreed Orders are the primary capital budget driver representing \$264 million, or 88%, of the budget. The fiscal year 2025 capital budget provides funding for the following major projects already under way:

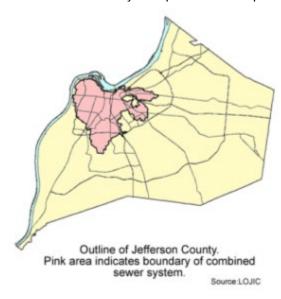
- \$74.2 million for the Paddy's Run Flood Pump Station Replacement and Capacity Upgrade
- \$68.4 million for the Morris Forman Biosolids Facility
- \$9 million for the Cedar Creek Water Quality Treatment Center Tertiary Filtration System

The capital budget will be funded by a combination of funds available from operations (revenue less operating expenses and debt service payments) and new debt.

Inflation and supply chain issues have made capital project delivery more expensive and more challenging. Work required to mitigate odors has added another \$49 million to our five-year capital plan. To deliver on this work while implementing rate increases within the rate authority granted to our Board, MSD has aggressively pursued alternative funding in the form of grants and low-interest loans. These funding mechanisms are providing more than \$225 million of support for in-progress projects. Nearly five percent of the fiscal year 2025 capital budget is funded by grants. Detailed budget information is available on our website at https://louisvillemsd.org/financial.

Progress on Second Amended Consent Decree

The earliest sewers in Louisville were built in the 1800's to drain stormwater to a river or stream after a rain event. When indoor plumbing became common in Louisville homes, a sanitary sewer became necessary to drain wastewater. The most convenient way to accomplish this was to combine the sanitary waste with the stormwater in the same pipe. These "combined sewers" are found in the area inside I-264. Combined sewers were built to send sanitary wastewater to treatment most of the time, but during rain events may "overflow" into waterways to prevent backups of sewage into buildings. These overflows are called



combined sewer overflows. The area outside I-264 is served by separate sanitary sewers, which are designed to carry only wastewater. Stormwater is conveyed through a separate drainage system. These separate sanitary sewers were not built to overflow. However, stormwater finds ways to enter these pipes. When the pipes fill up, they may overflow either into a waterbody, onto the ground or into a building. These overflows are called sanitary sewer overflows. Untreated wastewater, even when diluted with stormwater, carries bacteria and pollutants that may cause illness if accidentally ingested.

The Second Amended Consent Decree is a federally enforceable agreement that resolves alleged violations of the Clean Water Act for untreated overflows from Louisville's combined and separate sanitary sewer systems. MSD is

working diligently to reduce sewer overflows, many of which can be prevented. The Second Amended Consent Decree requires the completion of a variety of projects to reduce sewer overflows by 2035. Completion of these projects is expected to improve the water quality in both Louisville Metro streams and the Ohio River.

Since the start of the consent decree in 2005, MSD has seen a significant reduction in sewer overflows. For a 2-year cloudburst storm, 137 sanitary sewer overflow locations have been eliminated, from 197 modeled locations in 2007, to 60 in 2024. Combined sewer overflow volumes have been reduced by 5.85 billion gallons per typical year, from 6.5 billion gallons in 2001, to 648 million gallons in 2022. Additional information regarding the Consent Decree is available at https://www.msdprojectwin.org/.

Major Initiatives

Asset Management

In 2021, MSD began the development of a Strategic Asset Management Plan (SAMP) that will be the primary document that guides MSD's efforts in the administration of asset management activities. It brings focus to the strategy for improved asset management, and provides the overarching framework for achieving the mission, strategic goals, and critical success factors of the asset management program. The SAMP is a concise framework that creates a consistent approach for the MSD divisions that operate and maintain the assets. The SAMP framework provides the "rule book" for how facility and system plans will be created and implemented to help meet the established service level expectations and other operational objectives at the lowest life cycle cost. In addition to the SAMP, tactical asset management plans have been completed to define asset management activities at the facility level. Work is now focused on updating data and processes across the organization to provide the basis for asset renewal and replacement forecasting and capital project prioritization.

Community Benefits Program

MSD's Community Benefits Program seeks to encourage investment in the communities we serve by leveraging economic, environmental, and social impacts through the utility's large-scale engineering, construction, and professional service projects. MSD's Community Benefits program—launched in 2019—focuses on the utility's construction projects over \$2 million and professional service contracts over \$200,000. During the contractor proposal stage, MSD encourages contractors to voluntarily submit community-benefit commitments they will pursue if awarded the project. These can include charitable contributions, volunteer hours, or in-kind services to area nonprofits or schools. To date, the program has reinvested more than \$6 million back into the community.

Customer Assistance Programs

MSD offers two customer assistance programs to qualified customers. The Emergency Wastewater Rate Assistance Program (EWRAP) targets residential households at or below 150% of the federal poverty level and the Senior Citizen's Discount Program supports seniors with less than \$35,000 in total household income. Together, these programs provided more than \$1.8 million in rate assistance to 12,038 households in fiscal year 2024.

Credit Rating

MSD strives continuously to maintain strong financial performance and bond ratings. The credit ratings on our senior lien bonds remained at Aa3, AA, and AA- by Moody's Investors Service, Standard and Poor's Ratings Services, and Fitch, respectively, during fiscal year 2024. Strong credit ratings enable MSD to issue debt at lower borrowing costs.

Flood Protection System Reconstruction

The Louisville District of the U.S. Army Corps of Engineers (USACE) received \$5.3 million in federal funding as part of the fiscal year 2024 work plan. This funding will allow the Louisville District to begin improvements to portions of the Louisville flood protection system. USACE, in partnership with MSD, completed a feasibility study in 2020 that provided recommendations for rehabilitation of the system to restore the authorized level of flood risk management. Major elements of the work needed include repair and rehabilitation of 14 flood pump stations, floodwall repairs, and gate repair and replacement. Additional federal funding will be required before construction can begin.

Local Labor

MSD's Local Labor Preference Program seeks to ensure infrastructure dollars remain in our community for the benefit of the local economy by encouraging employment of individuals on MSD projects in and near the Louisville Metropolitan Statistical Area. For construction projects bid at a value of \$5 million and higher, local labor preference is required. Annually MSD monitors several projects totaling more than \$150 million with an estimated job creation of more than 1,500.

New Main Office Location

On May 15, 2024, MSD closed on the purchase of a building that will become our new Main Office. MSD has outgrown our existing location at 7th and Liberty Street in downtown and has been looking for a new site that can accommodate our growing workforce. Located at 1600 West Hill Street in the Parkhill Neighborhood, the new office building features an additional 82,600 square feet of office space. Space planning and improvements are underway with employees expected to be moved in stages over the next year.

Small Business Enterprise (SBE) Program

MSD's SBE program is committed to encouraging and facilitating full and equitable business opportunities for small, local business enterprises in the communities we serve. The SBE program is designed to improve opportunities and build capacity of small local business enterprises to compete in the open market at a prime contracting level on MSD projects. Contracts are awarded based on lowest responsive, responsible bid. MSD's Chief Engineer, in conjunction with the Supplier Diversity and SBE Programs Manager, will determine the projects to be bid to SBE program participants, if it appears that sufficient SBEs are available to provide competitive bids. Projects will range from \$40,000 to \$199,999. To date, 25 contracts have been awarded to SBE registered firms.

Supplier Diversity Program

MSD's Supplier Diversity Program is committed to ensuring meaningful opportunities to compete for MSD contracts in a prime or subcontracting capacity among qualified minority and women owned business enterprises (MBE/WBE). MSD has established goals at the construction subcontracting level for MBE/WBE participation of 18.0% African American, 2.0% Asian Indian American and 15.0% Caucasian Female. In addition, aspirational participation goals are established for MBE/WBE subconsultant participation on MSD engineering and professional service contracts valued at \$100,000 or more of 15% MBE and 6% WBE. In fiscal year 2024, MSD spent a total of \$17.1 million with MBE firms and \$18.9 million with WBE firms.

Awards and Acknowledgements

Government Finance Officers Association Distinguished Budget Presentation Award

The Government Finance Officers Association of the United States and Canada (GFOA) has awarded a Distinguished Budget Presentation Award to MSD for its fiscal year 2024 Budget for the fiscal year beginning July 1, 2023. This is the first year MSD has received this award. Governments must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device to receive the award.

Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting

GFOA has awarded a Certificate of Achievement for Excellence in Financial Reporting to MSD for its annual comprehensive financial report for the fiscal year ended June 30, 2023. This was the 32nd consecutive year that MSD has achieved this prestigious award. Governments must publish an easily readable and efficiently organized annual financial report to be awarded a Certificate of Achievement. This 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. We believe that our 2024 Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements and we will submit it to GFOA to determine its eligibility for another certificate.

We would like to recognize and thank MSD's team of finance professionals for the timely preparation of the Annual Comprehensive Financial Report for the fiscal year ended June 30, 2024. In addition, we would like to recognize all MSD team members for their commitment to ensuring safe clean waterways for the communities we serve.

Respectfully Submitted,

Brad Good

Chief Financial Officer

Michael Fitzner Controller



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Louisville and Jefferson County Metropolitan Sewer District Kentucky

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2023

Christopher P. Morrill

Executive Director/CEO

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT

Officials June 30, 2024

Board of Directors

Board Member	State Senate Distri	ct Political Party	Term Expires
Marita Willis - Chair	36th	Democrat	June 30, 2025
Ricky Mason - Vice Chair	6th	Independent	July 31, 2025
Gerald Joiner	33rd	Democrat	February 28, 2027
Jeff Mosley	26th	Independent	July 31, 2026
John Selent	6th	Democrat	July 31, 2027
Lonnie Wright	7th	Republican	July 31, 2026
Vacant			
Vacant			

Executive Staff

James A. Parrott	Executive Director, Secretary/ Treasurer
Carmen Moreno-Rivera	
Angela AkridgeChief Strategy	Officer for Business Transformation and Regulatory Compliance
Paul Bagley	
Brian Bingham	
Lynne Fleming	Chief Human Resources Officer
Brad Good	Chief Financial Officer
Lopez High	Chief of Facilities, Safety and Security
Sharise Horne	Chief of Equity Community Partnerships
David Johnson	
Rene' Lindsay	
Kim Reed	Chief Innovation Officer
Wes Sydnor	Chief of Government and Public Affairs
Kellie Watson	General Counsel and Legal Director

Our Mission

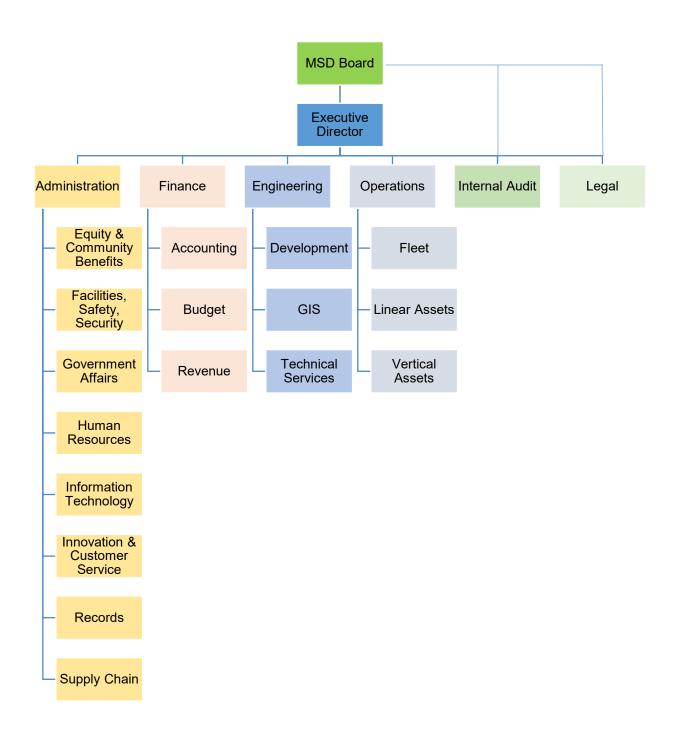
Provide quality wastewater, stormwater, and flood protection services to protect public health and safety through sustainable solutions, fiscal stewardship, and strategic partnerships.

Our Vision

The innovative regional utility for safe, clean waterways.

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT

Organizational Chart June 30, 2024





FINANCIAL SECTION



MSD's Derek R. Guthrie Water Quality Treatment Center



INDEPENDENT AUDITOR'S REPORT

Board of Directors Louisville and Jefferson County Metropolitan Sewer District Louisville. Kentucky

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Louisville and Jefferson County Metropolitan Sewer District, a component unit of the Louisville-Jefferson County Metro Government, as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise the Louisville and Jefferson County Metropolitan Sewer District's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Louisville and Jefferson County Metropolitan Sewer District, as of June 30, 2024, and the changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* (*Government Auditing Standards*), issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Louisville and Jefferson County Metropolitan Sewer District, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Louisville and Jefferson County Metropolitan Sewer District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
 include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
 statements.
- Obtain an understanding of internal control relevant to the audit 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 Louisville and Jefferson County Metropolitan Sewer District's internal control.
 Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Louisville and Jefferson County Metropolitan Sewer District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Report on Summarized Comparative Information

We have previously audited Louisville and Jefferson County Metropolitan Sewer District's 2023 financial statements, and we expressed an unmodified audit opinion on the financial statements of Louisville and Jefferson County Metropolitan Sewer District in our report dated October 31, 2023. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2023 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 14 through 26, the Schedule of Proportionate Share of the Net Pension Liability on page 69, the Schedule of Employer Contributions – Pension on page 71, the Schedule of Proportionate Share of the Net OPEB Liability on page 72, and the Schedule of Employer Contributions – OPEB on page 74 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Louisville and Jefferson County Metropolitan Sewer District's basic financial statements. The introductory and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information 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. The 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 introductory and statistical sections are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 29, 2024 on our consideration of the Louisville and Jefferson County Metropolitan Sewer District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Louisville and Jefferson County Metropolitan Sewer District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Louisville and Jefferson County Metropolitan Sewer District's internal control over financial reporting and compliance.

Crowe LLP

Crowe LLP

Louisville, Kentucky October 29, 2024

The management of Louisville and Jefferson County Metropolitan Sewer District (MSD) present this Management's Discussion and Analysis (MD&A) for the fiscal year ended June 30, 2024 and 2023. This narrative provides the reader with condensed comparative financial data, an analysis of the results of our operations, a description of capital asset and long term debt activity, and a discussion of future economic factors that will impact our operations. This MD&A is intended to be read in conjunction with the financial statements immediately following this section.

FINANCIAL HIGHLIGHTS

Fiscal Year 2024:

- Total net position increased from fiscal 2023 to fiscal 2024 by \$128.8 million, or 12.8%.
- Total assets and deferred outflows of resources increased \$216.1 million, or 5.3%, from fiscal 2023 to fiscal 2024.
- Operating revenues increased \$34.2 million, or 8.7%, from fiscal 2023 to fiscal 2024.
- Service and administrative costs increased \$13.3 million, or 10.7%, from fiscal 2023 to fiscal 2024.
- MSD maintained unrestricted cash and investments totaling \$164.2 million as of June 30, 2024, compared to \$135.7 million as of June 30, 2023.
- MSD had 335 days cash on hand at June 30, 2024, compared to 299 days cash on hand at June 30, 2023.
- Pledged revenue coverage was 2.25x for fiscal 2024 compared to 2.08x for fiscal 2023.

Fiscal Year 2023:

- Total net position increased from fiscal 2022 to fiscal 2023 by \$81.2 million, or 8.8%.
- Total assets and deferred outflows of resources increased \$125.5 million, or 3.2%, from fiscal 2022 to fiscal 2023.
- Operating revenues increased \$26.6 million, or 7.3%, from fiscal 2022 to fiscal 2023.
- Service and administrative costs increased \$5.6 million, or 4.8%, from fiscal 2022 to fiscal 2023.
- MSD maintained unrestricted cash and investments totaling \$135.7 million as of June 30, 2023, compared to \$118.6 million as of June 30, 2022.
- MSD had 299 days cash on hand at June 30, 2023, compared to 269 days cash on hand at June 30, 2022.
- Pledged revenue coverage was 2.08x for fiscal 2023 compared to 1.95x for fiscal 2022.

OVERVIEW OF THE FINANCIAL STATEMENTS

MSD uses the accrual basis of accounting to prepare its financial statements wherein revenues are recorded when earned and expenses are recorded at the time a liability is incurred. MD&A serves as a narrative introduction to the financial statements which consist of the following parts:

- Statements of Net Position: This statement includes all of MSD's assets, liabilities and deferred
 outflow and inflow of resources. It provides information about the nature and amounts of
 investments in assets and the obligations to creditors. In addition, it provides the basis for
 computing rate of return, evaluating the capital structure of MSD and assessing the liquidity and
 financial flexibility of the organization.
- Statements of Revenues, Expenses and Changes in Net Position: This statement identifies the revenues generated and expenses incurred during the fiscal year and helps the user to assess the financial efficiency of MSD during the time period for which the statement relates.
- Statements of Cash Flows: This statement provides information related to MSD's cash receipts and
 cash expenditures during the fiscal year. It reports cash receipts, cash payments, and net changes
 in cash resulting from operations, investing, and financing activities.

- Notes to the Financial Statements: The notes contain descriptions of the policies underlying the
 amounts displayed in the financial statements along with other information that is essential to a
 full understanding of the data provided in the financial statements.
- Required Supplementary Information: Information is presented related to MSD's pension and Other Post-Employment Benefits (OPEB) including annual contributions made to the plans and annual investment returns.

Other supplemental information is presented for comparative analysis and is not part of the basic financial statements. Other supplemental information consists of:

 Statistical Section: Ten years of financial statement information, operating indicators, and demographic information is presented for comparative analysis.

STATEMENTS OF NET POSITION

MSD's total net position at June 30, 2024 was \$1.1 billion, an increase of \$128.8 million, or 12.8%, from June 30, 2023 (see Figure 1). Total assets and deferred outflows increased \$216.1 million, or 5.3%, to \$4.2 billion. Total liabilities and deferred inflows increased \$87.3 million, or 2.9%, to \$3.1 billion.

MSD's total net position at June 30, 2023 was \$1.0 billion, an increase of \$81.2 million, or 8.8%, from June 30, 2022 (see Figure 1). Total assets and deferred outflows increased \$125.5 million, or 3.2%, to \$4.0 billion. Total liabilities and deferred inflows increased \$44.2 million, or 1.5%, to \$3.0 billion.

FIGURE 1 - CONDENSED NET POSITION INFO	RMATION			2024-	2023	2023-	2022
				Increase	%	Increase	%
(amounts in thousands)	FY 2024	FY 2023	FY 2022	(Decrease)	Change	(Decrease)	Change
Unrestricted current assets	\$ 167,444	\$ 171,322	\$ 153,423	\$ (3,878)	(2.3%)	\$ 17,899	11.7%
Restricted current assets	34,418	22,414	33,735	12,004	53.6%	(11,321)	(33.6%)
Capital assets	3,903,754	3,716,304	3,580,028	187,450	5.0%	136,276	3.8%
Unrestricted noncurrent assets	52,992	5,271	7,138	47,721	905.4%	(1,867)	(26.2%)
Restricted noncurrent assets	65,010	77,898	80,331	(12,888)	(16.5%)	(2,433)	(3.0%)
Other noncurrent assets	17,787	14,956	15,347	2,831	18.9%	(391)	(2.5%)
Total assets	4,241,405	4,008,165	3,870,002	233,240	5.8%	138,163	3.6%
Deferred outflows of resources	42,363	59,456	72,110	(17,093)	(28.7%)	(12,654)	(17.5%)
Total assets and deferred outflows	4,283,768	4,067,621	3,942,112	216,147	5.3%	125,509	3.2%
Current liabilities	36,314	17,940	20,395	18,374	102.4%	(2,455)	(12.0%)
Current liabilities from restricted assets	130,331	129,974	103,924	357	0.3%	26,050	25.1%
Noncurrent liabilities	2,906,165	2,874,580	2,846,272	31,585	1.1%	28,308	1.0%
Total liabilities	3,072,810	3,022,494	2,970,591	50,316	1.7%	51,903	1.7%
Deferred inflows of resources	77,862	40,848	48,489	37,014	90.6%	(7,641)	(15.8%)
Total liabilities and deferred inflows	3,150,672	3,063,342	3,019,080	87,330	2.9%	44,262	1.5%
Net investment in capital assets	1,040,323	955,494	891,231	84,829	8.9%	64,263	7.2%
Restricted, net	86,112	82,418	84,607	3,694	4.5%	(2,189)	(2.6%)
Unrestricted	6,661	(33,633)	(52,806)	40,294	(119.8%)	19,173	(36.3%)
Total net position	1,133,096	1,004,279	923,032	128,817	12.8%	81,247	8.8%
Total liabilities, deferred inflows & net position	\$ 4,283,768	\$ 4,067,621	\$ 3,942,112	\$ 216,147	5.3%	\$ 125,509	3.2%

Following is a discussion of significant changes in assets, liabilities, and net position between fiscal years 2024 and 2023, and between fiscal years 2023 and 2022, respectively.

Fiscal Year 2024:

The largest portion of MSD's net position is its net investment in capital assets. Net investment in capital assets increased \$84.9 million, or 8.9%, in fiscal 2024. Capital asset construction and acquisitions were

funded in fiscal 2024 by commercial paper notes¹, draws on State Revolving Fund loans², issuance of 2023C bonds³, cash generated from operations, and contributions in aid of construction from developers.

Funds restricted for a specific purpose by the 1993 Sewer and Drainage System Revenue Bond Resolution (the General Bond Resolution) are classified as restricted net position. MSD is required by the resolution to make monthly transfers to its debt service accounts sufficient to meet the semi-annual debt service payments on outstanding bonds. The General Bond Resolution sets a debt service reserve requirement equal to at least 10% of the face amount of all bonds issued under the resolution, 100% of the maximum aggregate net debt service in the current or any future fiscal year, or 125% of the average aggregate net debt service in the current or any future fiscal year. As of June 30, 2024, the reserve is funded at 125% of the average aggregate net debt service with a combination of cash and cash equivalents, investments, and a \$75 million debt service reserve surety policy⁴. Restricted net position increased \$3.7 million from fiscal 2023 to fiscal 2024 due a reduction of liabilities associated with restricted debt service.

The remaining balance of MSD's net position is unrestricted and may be used for any allowable purpose. Unrestricted net position increased \$40.2 million from fiscal 2023 to fiscal 2024 primarily as the result of a reduction in other long-term liabilities.

Fiscal Year 2023:

The largest portion of MSD's net position is its net investment in capital assets. Net investment in capital assets increased \$64.2 million, or 7.2%, in fiscal 2023. Capital asset construction and acquisitions were funded in fiscal 2023 by \$115 million of commercial paper notes⁵, draws on State Revolving Fund loans⁶, cash generated from operations and contributions in aid of construction from developers.

Funds restricted for a specific purpose by the 1993 Sewer and Drainage System Revenue Bond Resolution (the General Bond Resolution) are classified as restricted net position. MSD is required by the resolution to make monthly transfers to its debt service accounts sufficient to meet the semi-annual debt service payments on outstanding bonds. The General Bond Resolution sets a debt service reserve requirement equal to at least 10% of the face amount of all bonds issued under the resolution, 100% of the maximum aggregate net debt service in the current or any future fiscal year or 125% of the average aggregate net debt service in the current or any future fiscal year. As of June 30, 2023, the reserve was funded at 125% of the average aggregate net debt service with a combination of cash, investments and a \$75 million debt service reserve surety policy⁷. Restricted net position decreased \$2.1 million from fiscal 2022 to fiscal 2023 due a release of debt service reserves in conjunction with the 2023A and 2023B refunding revenue bond issues.

The remaining balance of MSD's net position is unrestricted and may be used for any allowable purpose. Unrestricted net position increased \$19.1 million from fiscal 2022 to fiscal 2023 primarily as the result of a reduction in other long-term liabilities.

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The increase in net position at June 30, 2024, was \$47.5 million, or 58.5%, as compared with June 30, 2023 (see Figure 2). MSD's total operating revenues increased by 8.7% to \$426.3 million and total operating expenses increased by 7.4% to \$259.3 million.

¹ See Note 5 – Long-Term Debt

² See Note 5 – Long-Term Debt

³ See Note 5 – Long-Term Debt

⁴ See Note 2 – Cash and Investments

⁵ See Note 5 – Long-Term Debt

⁶ See Note 5 – Long-Term Debt

⁷ See Note 2 – Cash and Investments

The increase in net position at June 30, 2023, was \$5.9 million, or 7.9%, as compared with June 30, 2022 (see Figure 2). MSD's total operating revenues increased by 7.3% to \$392 million and total operating expenses increased by 7.8% to \$241.3 million.

				2024-2	023	2023-2	2022
(amounts in thousands)	FY 2024	FY 2023	FY 2022	Increase (Decrease)	% Change	Increase (Decrease)	% Change
Operating revenues				,		,	
Service charges	\$ 414,192	\$ 385,163	\$356,870	\$ 29,029	7.5%	\$ 28,293	7.9%
Other operating income	12,083	6,863	8,497	5,220	76.1%	(1,634)	(19.2%
Total operating revenues	426,275	392,026	365,367	34,249	8.7%	26,659	7.3%
Non-operating revenues	22,951	4,283	9,001	18,668	435.9%	(4,718)	(52.4%
Total revenues	449,226	396,309	374,368	52,917	13.4%	21,941	5.9%
Operating expenses							
Service and administrative costs	137,929	124,641	118,978	13,288	10.7%	5,663	4.8%
GASB 68/75 pension expense	(9,986)	2,132	8,725	(12,118)	(568.4%)	(6,593)	(75.6%
Depreciation & amortization expense	131,336	114,562	103,964	16,774	14.6%	10,598	10.2%
Total operating expenses	259,279	241,335	231,667	17,944	7.4%	9,668	4.2%
Non-operating expenses							
Interest expense	102,312	104,100	101,703	(1,788)	(1.7%)	2,397	2.4%
Amortization of debt discount/premium	(5,870)	(9,558)	(13,404)	3,688	(38.6%)	3,846	(28.7%
Change in fair value - swaps	(5,009)	(7,614)	(11,293)	2,605	(34.2%)	3,679	(32.6%
Total non-operating expenses	91,433	86,928	77,006	4,505	5.2%	9,922	12.9%
Total expenses	350,712	328,263	308,673	22,449	6.8%	19,590	6.3%
ncome before capital contributions	98,514	68,046	65,695	30,468	44.8%	2,351	3.6%
Capital contributions	30,303	13,201	9,572	17,102	129.6%	3,629	37.9%
ncrease (decrease) in net position	128,817	81,247	75,267	47,570	58.5%	5,980	7.9%
Net position - Beginning	1,004,279	923,032	847,765	81,247	8.8%	75,267	8.9%
Net position - Ending	\$1,133,096	\$1,004,279	\$923,032	\$ 128,817	12.8%	\$ 81,247	8.89

Following is a discussion of the primary reasons for changes in MSD's revenues and expenses between fiscal years 2024 and 2023, and between fiscal years 2023 and 2022, respectively.

Fiscal Year 2024:

Operating revenues increased by \$34.2 million, or 8.7%, to \$426.3 million primarily due to wastewater and drainage service charge rate increases. Wastewater and drainage service charges in the Jefferson County service area increased 6.9% on August 1, 2023. Wastewater service charges in Oldham County increased 5.0% on August 1, 2023. Wastewater service charge rates in the Bullitt County service area increased 12.0% on January 1, 2024. Other operating revenues increased \$5.2 million, primarily due to capacity charges and system development surcharges.

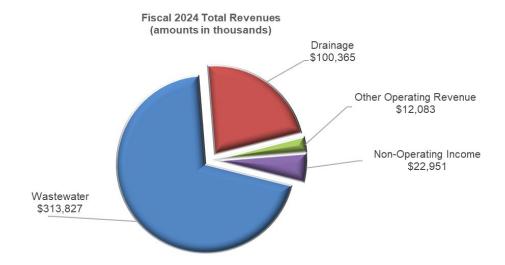
Operating expenses increased by \$17.9 million, or 7.4%, to \$259.3 million primarily due to higher depreciation and amortization expenses. The increase was partially offset by a reduction in GASB 68 pension expense and GASB 75 OPEB expense.

Fiscal Year 2023:

Operating revenues increased by \$26.6 million, or 7.3%, to \$392.0 million primarily due to a 5.0% rate increase effective August 1, 2022, to wastewater and drainage service charges in the Jefferson County service area. Wastewater rates in the Bullitt County service area increased 12.0% on January 1, 2023.

Operating expenses increased by \$9.6 million, or 4.2%, to \$241.3 million primarily due to higher depreciation and amortization expense. The increase was partially offset by a reduction in GASB 68 pension expense and GASB 75 OPEB expense.

Fiscal 2024 Total Revenues:



Wastewater service charges totaled \$313.8 million which is an increase of \$23.1 million, or 8.0%, from fiscal 2023. Wastewater service charge rates increased 6.9% and 5.0% in Jefferson County and Oldham County, respectively, on August 1, 2023. Wastewater service charge rates increased 12.0% in Bullitt County on January 1, 2024. An expansion of a major distillery in Jefferson County also contributed to higher wastewater service charges during fiscal year 2024.

Drainage service charges totaled \$100.3 million which is an increase of \$5.9 million, or 6.2%, from fiscal 2023. Drainage service charge rates in Jefferson County increased 6.9% on August 1, 2023.

Other operating income totaled \$12 million, which is an increase of \$5.2 million, or 76.1%, from fiscal 2023. This increase was driven by capacity fees and inflow and infiltration fees in fiscal 2024.

Non-operating revenues, which represent gain or loss on disposal of assets, interest income earned on investments, the federal interest subsidy on MSD's Build America Bonds, totaled \$22.9 million, which is an increase of \$18.6 million, or 435.9%, from fiscal 2023. Interest income earned driven by higher interest rates was the primary driver of the increase in non-operating revenues.

Fiscal 2024 Operating Revenues by Source

Fiscal 2024 Operating Revenues by Source:

Jefferson County
Wastewater
\$301,829

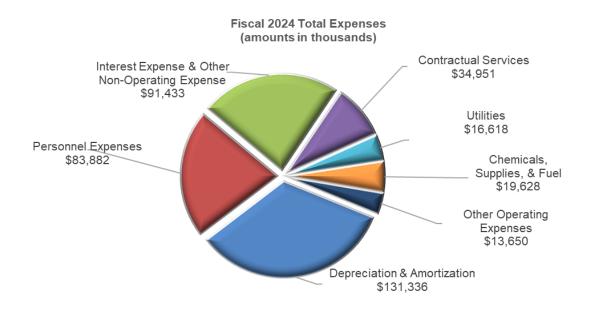
Other Operating
Revenue
\$12,083
Oldham County
Wastewater
\$7,260
Bullitt County Wastewater
\$4,738

Wastewater service charges totaled \$313.8 million and consisted of \$301.8 million for MSD's Jefferson County service area, \$7.3 million for MSD's Oldham County service area and \$4.7 million for MSD's Bullitt County service area. Wastewater service charges were 57.5% Residential, 32.1% Commercial and 10.4% Industrial.

Drainage service charges totaled \$100.3 million and consisted of MSD's Jefferson County drainage service area. Drainage service charges were 38.9% Residential, 54.2% Commercial and 6.9% Industrial.

Other operating revenue totaled \$12.0 million and consisted of \$11.8 million for Jefferson County, \$17.0 thousand for Oldham County and \$211.0 thousand for Bullitt County.

Fiscal 2024 Total Operating Expenses:



Personnel expenses decreased \$4.7 million, or 5.3%, to \$83.8 million primarily due to reduced GASB 68 pension and GASB 75 OPEB expenses thanks to improved investment performance compared to fiscal 2023⁸.

Contractual services increased by \$3.3 million, or 10.3% to \$34.9 million.

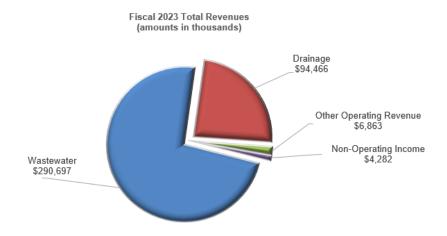
Utility expenses decreased \$2.2 million, or 11.8%, to \$16.6 million due to decreases in electric and natural gas consumption and decreased water usage.

Interest expense and other non-operating expenses increased by \$4.5 million, or 5.2% to \$91.4 million primarily due to the issuance of the 2023C revenue bonds⁹.

Depreciation and amortization increased by \$16.8 million, or 14.6%, to \$131.3 million as \$192.9 million in new assets were placed into service during fiscal year 2024¹⁰.

Total expenses in fiscal 2024 increased \$22.0 million, or 6.0%, to \$391.5 million before capitalization. Capitalized overhead totaled \$40.8 million bringing net total expenses to \$350.7 million.

Fiscal 2023 Total Revenues:



Wastewater service charges totaled \$290.6 million which is an increase of \$20.6 million, or 7.6%, from fiscal 2022. Wastewater service charge rates in Jefferson County increased 5.0% on August 1, 2022, and 12.0% in Bullitt County on January 1, 2023.

Drainage service charges totaled \$94.4 million which is an increase of \$7.6 million, or 8.8%, from fiscal 2022. Drainage service charge rates in Jefferson County increased 5.0% on August 1, 2022.

Other operating income totaled \$6.8 million, which is a decrease of \$1.6 million, or 19.2%, from fiscal 2022. This decrease was driven by lower capacity fees and inflow and infiltration fees in fiscal 2023.

Non-operating revenues, which represent gain or loss on disposal of assets, interest income earned on investments, the federal interest subsidy on MSD's Build America Bonds totaled \$4.2 million, which is a decrease of \$4.7 million, or 52.4%, from fiscal 2022. This reduction was driven primarily by a loss on disposal of land. In fiscal year 2023, MSD transferred land with a book value of \$13.3 million to Louisville Metro Government for the development of Alberta O. Jones Park and Waterfront Park.

⁸ See Note 12 - Defined Benefit Pension and Other Postemployment Benefits Plan - Cost Sharing - CERS

⁹ See Note 5 – Long Term Debt

¹⁰ See note 4 – Capital Assets

Fiscal 2023 Operating Revenues by Source

Fiscal 2023 Operating Revenues by Source:

Jefferson County
Wastewater
\$279,684

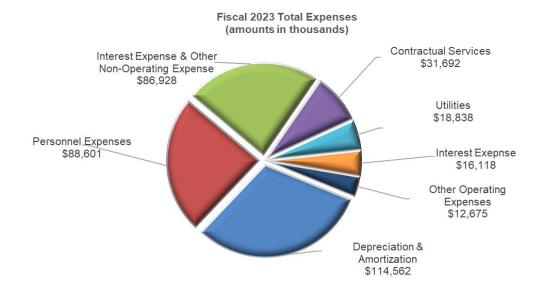
Other Operating
Revenue
\$6,863
Oldham County
Wastewater
\$6,800
Bullitt County Wastewater
\$4,213

Wastewater service charges totaled \$290.6 million and consisted of \$279.6 million for MSD's Jefferson County service area, \$6.8 million for MSD's Oldham County service area and \$4.2 million for MSD's Bullitt County service area. Wastewater service charges were 58.9% Residential, 32.5% Commercial and 8.6% Industrial.

Drainage service charges totaled \$94.4 million and consisted of MSD's Jefferson County drainage service area. Drainage service charges were 37.8% Residential, 55.6% Commercial and 6.6% Industrial.

Other operating revenue totaled \$6.8 million and consisted of \$6.3 million for Jefferson County, \$243 thousand for Oldham County and \$211 thousand for Bullitt County.

Fiscal 2023 Total Operating Expenses:



Personnel expenses decreased \$1.6 million, or 1.9%, to \$98.6 million due to lower GASB 68 pension and GASB 75 OPEB expenses because of better investment performance compared to fiscal 2022¹¹.

Contractual services increased slightly by \$404.0 thousand, or 1.3% to \$31.6 million.

Utility expenses increased \$2.2 million, or 13.5%, to \$18.8 million due to increases in electric and natural gas rates and increased water usage.

Interest expense and other non-operating expenses increased by \$9.9 million, or 12.9% to \$86.9 million primarily due to the issuance of the 2022A revenue bonds 12.

Depreciation and amortization increased by \$10.5 million, or 10.2%, to \$114.5 million as \$359 million in new assets were placed into service during fiscal year 2023¹³ and as MSD implemented GASB 96¹⁴.

Total expenses in fiscal 2023 increased \$18.5 million, or 5.3%, to \$369.4 million before capitalization. Capitalized overhead totaled \$41.1 million bringing net total expenses to \$328.2 million.

Capital Contributions:

Capital contributions increased \$17.1 million, or 129.6%, to \$30.3 million in fiscal 2024 (see Figure 3). This increase is primarily attributable to an increase in Federal grant contributions.

Capital contributions increased \$3.6 million, or 37.9%, to \$13.2 million in fiscal 2023 (see Figure 3). This increase is primarily attributable to an increase in drainage infrastructure contributions from developers.

						2024-2023				2023-2022			
'amounts in thousands)	FY 2	024	F۱	′ 2023	F	′ 2022		crease ecrease)	% Change	•		crease crease)	% Change
Cash flows from:													
Developer's capital - wastewater	\$ 4	,005	\$	3,649	\$	3,068	\$	356	9.8	%	\$	581	18.9%
Developer's capital - drainage	7	,340		8,294		3,841		(954)	100.0	%		4,453	0.0%
ederal grants	18	,277		1,436		2,611		16,841	1172.8	%		(1,175)	(45.0%)
Capital recovery		681		(178)		52		859	100.0	<u>%</u>		(230)	0.0%
Total capital contributions	\$ 30	,303	\$	13,201	\$	9,572	\$	17,102	129.6	%	\$	3,629	37.9%

¹¹ See Note 12 – Defined Benefit Pension and Other Postemployment Benefits Plan - Cost Sharing - CERS

¹² See Note 5 – Long Term Debt

¹³ See note 4 – Capital Assets

¹⁴ See Note 4 – Capital Assets

CAPITAL ASSETS

Total capital assets net of depreciation increased \$185.0 million, or 5.4%, to \$3.6 billion in fiscal 2024 (see Figure 4)¹⁵. Construction in progress was the driver for the growth in capital assets.

Total capital assets net of depreciation increased \$134.1 million, or 4.1%, to \$3.4 billion in fiscal 2023 (see Figure 4)¹⁶. Construction in progress was the driver for the growth in capital assets.

(amounts in thousands)	 FY 2024	FY 2023	FY 2022	(D	ncrease Decrease) 024-2023	% Change	(D	ncrease Jecrease) 023-2022	% Change
Sewer lines	\$ 1,717,845	\$ 1,712,607	\$ 1,638,136	\$	5,238	0.3%	\$	74,471	4.5%
Wastewater treatment facilities	384,515	277,003	242,875		107,512	38.8%		34,128	14.1%
Drainage facilities	835,920	900,625	787,664		(64,705)	-7.2%		112,961	14.3%
Pumping and lift stations	163,376	157,877	160,774		5,499	3.5%		(2,897)	-1.8%
Administrative facilities	23,726	8,833	9,273		14,893	168.6%		(440)	-4.7%
Maintenance facilities	7,660	12,429	6,851		(4,769)	-38.4%		5,578	81.4%
Machinery and equipment	21,354	23,927	23,625		(2,573)	-10.8%		302	1.3%
Miscellaneous	19,096	24,495	3,607		(5,399)	-22.0%		20,888	579.1%
Prepaid regulatory assets	284,728	283,043	287,021		1,685	0.6%		(3,978)	-1.4%
Intangible subscription assets	6,882	6,093	-		789	12.9%		6,093	100.0%
Construction in progress	 438,652	 309,372	 420,200		129,280	41.8%		(110,828)	-26.4%
Total	\$ 3,903,754	\$ 3,716,304	\$ 3,580,026	\$	187,450	5.0%	\$	136,278	3.8%

DEBT ADMINISTRATION

MSD ended fiscal 2024 with \$2.6 billion in outstanding long-term debt, an increase of \$35 million compared to the end of fiscal 2023¹⁷ (see Figure 5). This is primarily due to the issuance of Series 2023C revenue bonds and additional commercial paper to finance construction in progress. Short term debt outstanding, payable from restricted assets, totaled \$64.8 million at the end of fiscal 2024 compared to \$62.6 million at the end of fiscal 2023.

MSD ended fiscal 2023 with \$2.6 billion in outstanding long-term debt, an increase of \$36.7 million compared to the end of fiscal 2022¹⁸ (see Figure 5). This is primarily due to the issuance of additional commercial paper to finance construction in progress. Short term debt outstanding, payable from restricted assets, totaled \$62.6 million at the end of fiscal 2023 compared to \$54.9 million at the end of fiscal 2022.

¹⁵ See Note 4 – Capital Assets

¹⁶ See Note 4 – Capital Assets

¹⁷ See Note 5 – Long-Term Debt ¹⁸ See Note 5 – Long-Term Debt

mounts in thousands)	FY 2024	FY 2023	FY 2022	Increase (Decrease) 2024-2023	Increase (Decrease) 2023-2022
Senior Revenue Bonds					
Series 2009C	\$ 180,000	\$ 180,000	\$ 180,000	\$ -	\$ -
Series 2010A	330,000	330,000	330,000	-	-
Series 2013A	-	-	115,790	-	(115,790
Series 2013B	89,300	107,515	109,280	(18,215)	(1,765
Series 2013C	-	-	125	-	(125
Series 2014A	77,280	79,600	79,650	(2,320)	(50
Series 2015A	168,525	170,845	171,395	(2,320)	(550
Series 2015B	59,865	62,995	65,975	(3,130)	(2,980
Series 2016A	145,470	146,540	147,500	(1,070)	(960
Series 2016B	16,585	17,830	19,910	(1,245)	(2,080
Series 2016C	-	-	12,995	-	(12,995
Series 2017A	138,035	143,280	149,390	(5,245)	(6,110
Series 2017B	13,505	30,245	31,210	(16,740)	(965
Series 2018A	60,380	60,380	60,380	-	-
Series 2019A	-	-	8,845	-	(8,845
Series 2020A	221,355	223,000	224,000	(1,645)	(1,000
Series 2020B	33,137	-	-	33,137	-
Series 2020C	37,790	108,415	109,605	(70,625)	(1,190
Series 2021A	214,665	227,720	240,485	(13,055)	(12,765
Series 2022A	223,500	224,250	224,750	(750)	(500
Series 2023A	49,745	49,745	-	-	49,745
Series 2023B	41,950	41,950	-	-	41,950
Series 2023C	348,380	-	-	348,380	-
Bond Anticipation Notes					
Series 2021A	-	-	226,340	-	(226,340
Series 2022A	-	226,340	-	(226,340)	226,340
Other Subordinate Debt					
General Obligation Bonds	8,987	9,894	10,774	(907)	(88)
Commercial Paper Notes	212,195	165,000	50,000	47,195	115,000
SRF Loans	43,043	39,797	39,998	3,246	(201
KACO Lease	1,525	1,700	1,870	(175)	(170
	\$ 2,715,217	\$ 2,647,041	\$ 2,610,267	\$ 68,176	\$ 36,774

Pledged Revenue Debt Service Ratio:

Although net operating income is the most significant component of determining MSD's pledged revenue debt service coverage ratio, other sources, including investment income and current period payments of property owner assessments, are also included in available revenues and net revenues for purposes of demonstrating MSD's compliance with the debt service ratio tests in the General Bond Resolution.

The General Bond Resolution and its supplements require MSD to provide available revenues for each fiscal year sufficient to pay the sum of 110.0% of each year's aggregate net debt service on revenue bonds, the amount, if any, required to be paid into the reserve account, all operating expenses as estimated in the annual budget, debt service on senior subordinated debt and any other subordinate debt and amounts

necessary to pay and discharge all charges or liens payable out of available revenues. Available revenues, as used for purposes of the resolution, means all revenues and other amounts received by MSD and pledged as security for payment of bonds issued pursuant to the resolution, but excludes interest income which is capitalized in accordance with generally accepted accounting principles.

Net operating expenses include all reasonable, ordinary, usual or necessary current expenses of maintenance, repair, and operation determined in accordance with generally accepted accounting principles and the enterprise basis of accounting. Operating expenses do not include reserves for extraordinary maintenance and repair or administrative and engineering expenses of MSD which are necessary or incidental to capital improvements for which debt has been issued and which may be paid from proceeds of such debt.

Aggregate net debt service is debt service on all bonds issued pursuant to the resolution including principal payments, excluding (i) interest expense which, in accordance with generally accepted accounting principles, is capitalized and which may be paid from the proceeds of debt and (ii) other amounts, if any, available or expected to be available in the ordinary course of business for payment of debt service.

MSD's pledged revenue debt service coverage ratio¹⁹, calculated on the foregoing basis, was 225.2% in 2024, 208.1% in 2023 and 195.4% in 2022. (see Figure 6).

FIGURE 6 - PLEDGED REVENUE DE	EBT SERVICE COVER	AGE			
(amounts in thousands)	FY 2024	FY 2023	FY 2022	Increase (Decrease) 2024-2023	Increase (Decrease) 2023-2022
Total available revenues	\$449,723	\$411,058	\$374,827	9.4%	9.7%
Total net operating expenses	137,930	124,641	118,978	10.7%	4.8%
Net revenue	311,793	286,417	255,849	8.9%	11.9%
Aggregate net debt service	\$138,465	\$137,613	\$130,925	0.6%	5.1%
Debt service coverage ratio	225.2%	208.1%	195.4%	8.2%	6.5%

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¹⁹ Excludes depreciation, amortization, GASB 68 pension expense and GASB 75 OPEB expense

Credit Ratings:

See Figure 7 for MSD's existing credit ratings.

FIGURE 7- BOND AND COMMERCIAL PAPER RATINGS							
	Revenue Bonds	Subordinate Bond Anticipation Notes	Subordinate Commercial Paper Notes				
Fitch Ratings	AA-						
Moody's Investors Service, Inc.	Aa3	MIG 1	P-1				
S&P Global Ratings	AA	SP-1+	A-1+				

RATES

On May 28, 2024, MSD adopted a 5-year capital improvement plan for Jefferson County totaling \$1.2 billion. Of this total, 86.0% is allocated to compliance with regulatory requirements, including the terms of the Second Amended Consent Decree. MSD plans to finance up to 72.0% of the 5-year plan with additional debt. The MSD Board has approved a 6.9% rate increase for wastewater and drainage service charges for the Jefferson County service area effective August 1, 2024. Additional rate increases will be required within the next 5 years to maintain the financial metrics required to support the new debt without negatively impacting MSD's existing credit rating.

On May 28, 2024, MSD adopted a 5-year capital improvement program for Oldham County totaling \$24.1 million. Of this total, 98.0% is allocated to compliance with regulatory requirements. Pursuant to the terms of an Interlocal Cooperation Agreement, on July 29, 2024, the MSD Board approved a 5.0% increase in the wastewater volume charge for MSD's Oldham County service area effective August 1, 2024. Additional rate increases will be required within the next 5 years to fund the capital improvement program.

On May 28, 2024, MSD adopted a 5-year capital improvement program for Bullitt County totaling \$46.7 million. Of this total, 98.0% is allocated to compliance with regulatory requirements. Additional rate increases will be required within the next 5 years to fund the capital improvement program.

For additional information see Note 10, Commitments and Contingencies, and Note 11, Subsequent Events.

REQUESTS FOR ADDITIONAL INFORMATION

This report is intended to provide readers with a general overview of MSD's finances and to provide information regarding the receipts and usage of funds. If you need clarification regarding a statement(s) made in the report or need additional information, please contact the Louisville and Jefferson County Metropolitan Sewer District, 700 West Liberty Street, Louisville Kentucky 40203. You can also submit a request for additional information via MSD's website, www.msdlouky.org.

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT COMPARATIVE STATEMENT OF NET POSITION AS OF JUNE 30, 2024

(With Summarized Financial Information as of June 30, 2023) (amounts in thousands)

	2024	2023
Current Assets		
Unrestricted Current Assets		
Cash and cash equivalents	\$ 55,863	\$ 66,305
Investments	60,002	69,417
Accounts receivable, less allowance for		
doubtful accounts of \$2,341 (2024), \$2,095 (2023)	44,148	28,963
Inventories	6,264	5,811
Accrued interest receivable	981	588
Prepaid expenses and other current assets	186	238
Total unrestricted current assets	167,444	171,322
Restricted Current Assets		
Cash and cash equivalents	23,366	22,414
Investments	11,052	-
Total restricted current assets	34,418	22,414
Total Current Assets	201,862	193,736
Noncurrent Assets		
Unrestricted Noncurrent Assets		
Investments	48,369	-
Accounts receivable, noncurrent	4,623	5,271
Total unrestricted noncurrent assets	52,992	5,271
Restricted Noncurrent Assets		
Cash and cash equivalents	629	3,067
Investments	64,381	74,831
Total restricted noncurrent assets	65,010	77,898
Capital Assets		
Utility plant in service	4,795,037	4,625,654
Less allowance for depreciation	(1,621,545)	(1,507,858)
Net utility plant in service	3,173,492	3,117,796
Construction in progress	438,652	309,372
Prepaid regulatory assets, net of amortization	284,728	283,043
Subscription assets, net of amortization	6,882	6,093
Net capital assets	3,903,754	3,716,304
Other Noncurrent Assets		
Unamortized bond issuance costs	14,501	14,221
Unamortized reserve fund insurance	705	735
Net OPEB asset	2,581	
Total other noncurrent assets	17,787	14,956
Total Noncurrent Assets	4,039,543	3,814,429
Total Assets	4,241,405	4,008,165
Deferred Outflow of Resources		
Deferred outflow - pension	21,916	20,102
Deferred outflow - OPEB	9,587	16,397
Unamortized loss on refunding	10,860	22,957
Total deferred outflow of resources	42,363	59,456
Total Assets and Deferred Outflow of Resources	\$ 4,283,768	\$ 4,067,621

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT COMPARATIVE STATEMENT OF NET POSITION

AS OF JUNE 30, 2024

(With Summarized Financial Information as of June 30, 2023)
(amounts in thousands)

	2024	2023
Current Liabilities		
Current Liabilities To Be Paid From Unrestricted Assets		
Accounts payable	\$ 26,011	\$ 8,126
Accrued salaries and related benefits	10,303	9,814
Total unrestricted current liabilities	36,314	17,940
Current Liabilities To Be Paid From Restricted Assets		
Accounts payable and accrued expenses (capital),		
includes contractor retainage of \$13,946 (2024), \$6,272 (2023)	48,188	38,706
Accrued interest payable	13,316	17,895
Refundable deposits	1,689	2,142
Revenue bonds payable	53,985	52,375
Bond anticipation note	, -	7,000
Short term commercial paper notes	7,325	7,145
Other subordinate debt	3,476	3,095
Subscription asset liability	2,352	1,616
Total restricted current liabilities	130.331	129.974
Total Current Liabilities	166,645	147,914
Noncurrent Liabilities		
Bonds payable, net	2,506,367	2,249,954
Bond anticipation note	_,000,00.	212,195
Commercial paper notes	204,870	165,000
Other subordinate debt	50,079	48,296
Net pension liability	119,970	132,407
Net OPEB liability	-	36,145
Investment derivative asset liability	21,204	27,247
Subscription asset liability	3,675	3,336
Total Noncurrent Liabilities	2,906,165	2,874,580
Total Liabilities	3,072,810	3,022,494
Deferred Inflow of Resources		
Deferred inflow - pension	15,528	6,605
Deferred inflow - OPEB	42,288	15,030
Deferred inflow - derivative instruments	18,311	17,277
Other deferred inflows	1,735	1,936
Total deferred inflow of resources	77,862	40,848
Total Liabilities and Deferred Inflow of Resources	\$ 3,150,672	\$ 3,063,342
Net Position		
Net investment in capital assets	\$ 1,040,323	\$ 955,494
Net restricted assets	86,112	82,418
Unrestricted	6,661	(33,633)
Total net position	1,133,096	1,004,279
Total Liabilities, Deferred Inflow of Resources and Net Position	\$ 4,283,768	\$ 4,067,621

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT COMPARATIVE STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION AS OF JUNE 30, 2024

(With Summarized Financial Information as of June 30, 2023)
(amounts in thousands)

	2024	2023	
Operating Revenues			
Service charges	\$ 414,192	\$ 385,163	
Other operating income	12,083	6,863	
Total operating revenues	426,275	392,026	
Operating Expenses			
Service and administrative costs	137,929	124,641	
GASB 68 pension/GASB 75 OPEB actuarial (income) expense	(9,986)	2,132	
Depreciation and amortization	131,336	114,562	
Total operating expenses - net	259,279	241,335	
Income from Operations	166,996	150,691	
Non-operating Revenue (Expenses)			
Gain/Loss disposal of assets	(111)	-	
Transfer of assets	-	(14,320)	
Investment income	13,618	7,253	
Build America bond refund	9,444	11,350	
Interest expense - bonds	(98,705)	(91,736)	
Interest expense - derivative instruments	(1,706)	(3,988)	
Interest expense - other	(14,650)	(15,337)	
Amortization of debt discount / premium	7,312	13,189	
Amortization of loss on refunding	(1,442)	(3,631)	
Capitalized interest	12,749	6,961	
Change in fair value - swaps	5,009	7,614	
Total non-operating revenue (expenses) - net	(68,482)	(82,645)	
Income before capital contributions	98,514	68,046	
Capital contributions	30,303	13,201	
Increase in net position	128,817	81,247	
Net position, beginning	1,004,279	923,032	
Net position, ending	\$ 1,133,096	\$ 1,004,279	

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT COMPARATIVE STATEMENT OF CASH FLOWS AS OF JUNE 30, 2024

(With Summarized Financial Information as of June 30, 2023)
(amounts in thousands)

	<u>2024</u>	<u>2023</u>		
Cash Flows from Operating Activities				
Cash received from customers	\$ 424,067	\$ 393,303		
Cash paid to suppliers	(96,351)	(106,443)		
Cash paid to employees	(64,526)	(59,643)		
Net Cash Provided by Operating Activities	263,190	227,217		
Cash Flows from Capital and Related Financing Activities				
Proceeds from issuance of revenue bonds	127,575	-		
Proceeds from issuance of bond anticipation note	-	229,468		
Proceeds from issuance of commercial paper	2,498,755	595,000		
Proceeds from other subordinate debt	5,316	1,282		
Payments for retirement of revenue bonds	(52,877)	(57,455)		
Payments for retirement of bond anticipation note	(226,340)	(226,340)		
Payments for retirement of commercial paper	(2,251,560)	(480,000)		
Payments for retirement of other subordinated debt	(3,153)	(2,533)		
Payments for interest expense	(117,933)	(105,800)		
Payments for interest on derivative instruments	(1,706)	(3,988)		
Build America bond interest subsidy	10,360	9,061		
Proceeds from capital grants	3,912	(88)		
Proceeds from sales of capital assets	21	-		
Payments for capital assets	(241,621)	(190,945)		
Proceeds from assessments	704	1,956		
Net Cash Provided (Used) by Capital and Related Financing	(248,547)	(230,382)		
Cash Flows from Investing Activities				
Purchase of investments	(302,136)	(142,894)		
Maturity of investments	265,231	160,468		
Investment income	10,334	5,523		
Net Cash Provided (Used) by Investing Activities	(26,571)	23,097		
Net Increase (Decrease) in Cash and Cash Equivalents	(11,928)	19,932		
Cash and Cash Equivalents, Beginning of Year	91,786	71,854		
Cash and Cash Equivalents, End of Year	\$ 79,858	\$ 91,786		

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT COMPARATIVE STATEMENT OF CASH FLOWS AS OF JUNE 30, 2024

(With Summarized Financial Information as of June 30, 2023)
(amounts in thousands)

	<u>2024</u>		2023	
Reconciliation of Operating Income to Net Cash provided by Operating Activities				
Income from operations	\$	166,996	\$ 150,691	
Adjustments to reconcile operating income to net cash provided by operating activities				
Capitalized overhead		(40,786)	(41,151)	
Depreciation and amortization		131,336	114,562	
Accounts receivable		(1,754)	1,054	
Inventories		(452)	(549)	
Prepaid expense		(84)	2,711	
Accounts payable		17,886	(1,681)	
Customer deposits		(453)	222	
Accrued liabilities		488	(774)	
Pension liability and deferred inflows and outflows of resources		(5,328)	(1,630)	
OPEB liability and deferred inflows and outflows of resources		(4,659)	3,762	
Net Cash Provided by Operating Activities	\$	263,190	\$ 227,217	
Non-Cash Capital Financing and Investing Activities				
Contribution of plant, lines and other facilities by developers and property owners	\$	11,345	\$ 11,943	
Construction costs in accounts payable		48,188	38,706	
Transfer of assets		-	14,320	
Unrealized (gain)/loss on investments		(3,139)	(2,040)	
Decrease in interest rate swap deferred revenue		(226)	474	
Change in fair value - derivative instruments		5,009	7,614	
Bonds issued for refunding of debt - Series 2013A		-	91,695	
Bonds issued for refunding of debt - Series 2013B and 2020C		288,840	-	

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NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Louisville and Jefferson County Metropolitan Sewer District (MSD), a discretely presented component unit of Louisville/Jefferson County Metro Government, are prepared in conformity with accounting principles generally accepted in the United States of America as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. MSD follows GASB Pronouncements as codified under GASB 62, including electing to report as a regulated operation. MSD uses proprietary fund accounting (enterprise fund). To comply with industry accounting standards and adhere to transactional intent, MSD, as a regulated operation under GASB 62, applies ASC 980, Regulated Accounting, where applicable. The basic financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with MSD's financial statements for the year ended June 30, 2023, from which the summarized information was derived.

Reporting Entity:

MSD is a public body corporate, and political subdivision of the Commonwealth of Kentucky. MSD was created in 1946 pursuant to Chapter 76 of the Kentucky Revised Statutes, in the interest of the public health and for the purpose of providing adequate sewer and drainage facilities in the urbanized area of the Louisville Metropolitan Area. Pursuant to Chapter 76, MSD is governed by a Board which consists of eight members who are appointed by the Mayor of Louisville Metro Government, subject to approval of Louisville Metro Council. Not more than five Board members may be of the same political party. However, there is not a continuing supervisory relationship exercised by Louisville Metro Government over MSD with respect to MSD's statutory public functions.

Chapter 76 authorizes MSD to provide sewer and drainage facilities and services. MSD is further authorized by the statute to establish and collect service charges and to budget accordingly for operations and maintenance, capital outlays and debt service on obligations it is authorized by the statute to incur. No special financing relationship exists between Louisville Metro Government and MSD, nor is Louisville Metro Government empowered by law or custom to approve MSD's operating or capital budgets; nor are they responsible for financing deficits or disposing of surplus funds.

MSD has complete control, possession and supervision of the sewer and drainage system in large portions of Jefferson County, and has statutory authority to construct additions, betterments, and extensions within its service area. Additionally, MSD has statutory responsibility for approval of the design and proper construction of sewer and drainage facilities within the County's boundaries. There are cities within Jefferson County that, by statute, have the option of using MSD sewer services on a contractual basis. Third and fourth class cities also have the option of obtaining drainage services from MSD.

In 2018 the Kentucky General Assembly amended Kentucky Revised Statute § 76.080 to allow MSD to enter into agreements with other entities to acquire by purchase, any real or personal property, or any interest, right, easement, or privilege therein, outside of its Jefferson County boundaries in connection with the acquisition, construction, operation, repair or maintenance of any sewage, wastewater, or drainage facility. MSD has subsequently extended its wastewater service area into portions of neighboring Bullitt and Oldham counties through interlocal agreements.

MSD's enterprise business activities are managed by its Board, which has statutory authority to elect officers, enact bylaws and enter into agreements and contracts for the management and regulation of MSD's affairs. MSD's revenue is derived from wastewater and drainage service charges which are collected from residential, commercial, and industrial customers. MSD controls the collection of all revenue, disbursement of payables and title to all sewer and drainage assets. Wastewater service charges are distributed among customer classes based on actual costs incurred to collect and treat wastewater. Drainage service charges are distributed among customer classes based on actual costs of drainage services per equivalent unit of impervious surface.

Changes in MSD's service charges are implemented by MSD's Board. Kentucky statute provides that MSD's service charge revenues shall be sufficient to provide for the operation and maintenance of the system and for debt service. Louisville Metro ordinance § 50.24 requires that when MSD's net revenues are less than 1.1 times the debt service on outstanding revenue bonds for any consecutive six-month period, the MSD Board shall amend the schedule of wastewater and drainage service charges in order to maintain 1.1 times coverage so long as the amended rates do not generate additional revenue from service charges in excess of 7.0% during the succeeding twelve-month period. Amendments that would generate additional revenues in excess of 7.0% require Louisville Metro Council approval.

Chapter 76 permits MSD to finance sewer and drainage system construction, acquisition, and other capital improvements through the issuance of its revenue bonds and with the proceeds of governmental grants, property owner contributions in aid of construction and bonds and loans for which pledge of repayment is subordinated to the pledge of all revenues given by MSD for the security of its revenue bond holders. MSD indebtedness does not constitute indebtedness of Louisville Metro Government or the Commonwealth, but Louisville Metro Government must authorize by ordinance the issuance by MSD of revenue bonds to finance projects within the service area.

Basis of Accounting:

The sewer and drainage system owned and operated by MSD is accounted for using a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation of the system are included on the Statements of Net Position. Total net position is segregated into net investment in capital assets, restricted for payment of bond principal and interest and unrestricted. Operating statements present increases (e.g., revenues) and decreases (e.g., expenses) in net position. MSD utilizes the accrual basis of accounting wherein revenues are recorded when earned and expenses are recorded at the time the liability is incurred.

Cash and Cash Equivalents:

For purposes of the Statements of Cash Flows, MSD includes repurchase agreements and other investments with an original maturity of three months or less in cash and cash equivalents. Both restricted and unrestricted amounts are included on the Statements of Cash Flows.

Restricted and Unrestricted Funds:

Restricted funds are reserved for the purpose of bond debt service, funding of capital construction, cost of issuance, and debt service reserves. Unrestricted funds, generated from service fees and other operating income, are used to pay for operating expenses. When an expense or outlay is incurred for which both restricted and unrestricted net position is available, it is MSD's general practice to use revenue from operations to finance construction, then to reimburse from restricted net position for construction as needed.

Investment Securities:

Kentucky Revised Statute § 66.480 and MSD's investment policy authorize MSD to invest money subject to its control in obligations of the United States and of its agencies and instrumentalities. Other allowable investments include obligations backed by the full faith of the United States or its agencies, obligations of any corporation of the United States, certificates of deposit or other interest-bearing accounts of any bank or savings and loan institution which are insured by the Federal Deposit Insurance Corporation, securities issued by a state or local government, money market mutual funds investing in any of the securities described above, individual equity securities, and individual corporate bonds. Investments are made based upon prevailing market conditions at the time of the transaction with the intent to hold the instrument until maturity. With this strategy, investments would be expected to reach maturity with limited realized gains or losses. If selling an investment before its maturity and reinvesting the proceeds can enhance the portfolio's yield, then this action is permitted. Investments are stated at fair value. Investment income consists of interest income and the change in fair value of investments. Investment income is reduced by any applicable estimated federal arbitrage liability.

Revenues. Expenses and Receivables:

Operating revenues are those revenues that are generated directly from the primary activity of MSD. These revenues are wastewater and drainage service charges and other operating income. Under contractual agreements, Louisville Water Company and Oldham County Water District are responsible for the billing and collection of wastewater and drainage service charges on behalf of MSD. Operating expenses are expenses incurred through the activities of operating and maintaining MSD utility plant, lines, and equipment.

Non-operating revenues and expenses are comprised of investment and financing earnings and costs, changes in the fair value of derivative instruments, as well as contributions from outside sources.

Accounts receivable are stated at the amount management expects to collect from outstanding customer accounts. Accounts are considered past due 30 days from the invoice date. Management provides an allowance for doubtful account that is based on historical collection experience and a review of the status of individual accounts. Accounts that remain outstanding after management has exerted reasonable collection efforts are written off through a charge to allowance for doubtful accounts and a credit to accounts receivable. The allowance for doubtful accounts totaled \$2,341,086 on June 30, 2024.

Assessment receivables represent amounts billed to residents to have sewer lines installed in their neighborhood. Assessment receivables are considered past due once the balance is 90 days in arrears. These receivables may be current or non-current assets.

Inventory:

Inventory is stated at cost. Inventory consists of supplies and parts used in the operation of MSD's assets and other related equipment. Inventory totaled \$6,264,017 on June 30, 2024.

Utility Plant, Lines, and Equipment:

Utility plant, lines, and equipment are capitalized when the unit cost is greater than or equal to \$10,000. These assets are recorded at historical cost which includes acquisition or construction costs and internal overhead costs during construction. Capitalized assets are depreciated over their projected useful lives using the straight-line method. The estimated useful lives for these assets are as follows:

Building and other structures	30-50 years
Land improvements	10-30 years
Miscellaneous machinery	10-20 years
Vehicles	6-12 years
Equipment, heavy	15-30 years
Equipment, light	5-15 years
Sewer lines and drainage channels	20-80 years

Costs incurred for capital construction and acquisition are carried in construction in progress until disposition or completion of the related projects. The major components of construction in progress are sewer line rehabilitation, wastewater treatment facilities, drainage facilities, and flood protection systems. Costs relating to projects not pursued are expensed, while costs relating to completed projects are capitalized.

Capital Contributions:

Capital Contributions consist of infrastructure contributed from developers and grant proceeds received from government agencies.

Assets acquired through contributions are recorded at estimated acquisition value at the date of contribution. Contributed assets in the form of sewer and drainage infrastructure constructed by developers during fiscal year 2024 totaled \$11,344,715.

Governmental grants represent the estimated portion of costs incurred for which grants are expected to be paid to MSD by the governmental grantor. These amounts are recorded as a receivable and revenues from contributions at the time the related expenditures are incurred. Revenues from contributions are part of the change in net position. Governmental grants for fiscal year 2024 expenditures totaled \$18,277,341.

Intangible Subscription Assets:

In accordance with GASB Statement No. 96, MSD records the intangible right to use certain assets provided through subscription based information technology agreements and accrues a liability for future payments under these agreements. MSD expenses subscription based information technology agreements with a total contract value of less than \$150,000.

Prepaid Regulatory Assets:

In accordance with the provisions for regulated utility entities under GASB 62, MSD follows the practice of recognizing the interest incurred as part of the cost of acquiring assets that are debt-financed for rate-making purposes as a capital asset. MSD amortizes capitalized interest over a period of forty years.

Bonds Payable:

Bonds payable are recorded at the principal amount outstanding, net of any applicable premium or discount. Original issue discounts and premiums on bonds are amortized as a component of interest expense using the straight-line method, which approximates the effective interest method, over the lives of the bonds to which they relate.

Bonds outstanding, which have been refunded and economically defeased, are not included in long-term debt. The related assets are not included in investments. Any loss on refunding, which is the difference between the reacquisition price and the net carrying amount of the old debt, is deferred outflow of resources and amortized as a component of interest expense over the shorter of either 1) the original life of the refunded debt or 2) the life of the refunding debt.

Bond issuance costs are capitalized and amortized over the life of the respective bond issue using the straight-line method, which approximates the effective interest method, pursuant to the election of regulatory operation under GASB 62, as they are deemed recoverable through future rates.

Derivative Instruments:

MSD enters into interest rate swap agreements to modify interest rates on outstanding debt. MSD records the net interest expenditures resulting from these agreements and amortizes gains/losses resulting from the termination of these agreements until the original termination date of the agreement. The changes in fair value of derivative instruments that are classified as hedging derivative instruments are reported in the Statements of Net Position as deferred outflow of resources. Changes in fair value of investment derivative instruments are reported in non-operating revenue (expenses) on the Statements of Revenues, Expenses and Changes in Net Position.

Compensated Absences:

Vacation and personal pay benefits are accrued as accumulated and vested by MSD employees.

Allocation of Overhead:

MSD allocates overhead costs to its core business processes: operations and maintenance; design, construction and acquisition of plant lines and other facilities; and subsidiary business enterprises.

Income Tax Status:

MSD is exempt from federal income tax under the Internal Revenue Code as a political subdivision of the Commonwealth of Kentucky.

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 assumptions and estimates that affect the reported amounts of assets and liabilities 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.

Reclassifications:

Prior period financial statement amounts have been reclassified to conform to current period presentation. These reclassifications had no effect on the changes in net position or total net position.

Adoption of New Accounting Pronouncements:

Effective July 1, 2023, MSD adopted the following GASB Statements:

- GASB Statement 99, Omnibus 2022. The requirements of this statement related to financial guarantees and classification and reporting of derivative instruments within the scope of Statement 53 were effective for fiscal years beginning after June 15, 2023. The objective of these requirements is to improve the consistency of authoritative literature by addressing accounting and reporting for financial guarantees.
- GASB Statement No. 100, Accounting Changes and Error Corrections—an amendment of GASB Statement No. 62. The objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability.
- GASB Implementation Guide No. 2021-1, Implementation Guidance Update 2021. The objective
 of this Implementation Guide is to provide guidance that clarifies, explains, or elaborates on GASB
 Statements.
- GASB Implementation Guide No. 2023-1, *Implementation Guidance Update 2023*. The objective of this Implementation Guide is to provide guidance that clarifies, explains, or elaborates on GASB Statements.

Adoption of GASB Statements No. 99, No. 100, Implementation Guide No. 2021-1 and Implementation Guide No. 2023-1 do not have a material impact on MSD's financial reporting.

Recent Accounting Pronouncements:

GASB has issued additional guidance that is not yet effective. MSD is currently reviewing the provisions of the following GASB Statements to determine the impact of implementation in future periods.

- GASB Statement No. 101, Compensated Absences. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. The requirements of this Statement will take effect for financial statements starting with the fiscal year that begins July 1, 2024.
- GASB Statement No, 102, Certain Risk Disclosures. The objective of this Statement is to provide users of government financial statements with essential information about risks related to a government's vulnerabilities due to certain concentrations or constraints. The requirements of this Statement will take effect for financial statements starting with the fiscal year that begins July 1, 2024.

GASB Statement No. 103, Financial Reporting Model Improvements. The objective of this
Statement is to improve key components of the financial reporting model to enhance its
effectiveness in providing information that is essential for decision making and assessing a
government's accountability. The requirements of this Statement will take effect for financial
statements starting with the fiscal year that begins July 1, 2025.

NOTE 2 - CASH AND INVESTMENTS

The following table provides a reconciliation of cash, cash equivalents and investments as shown on the Comparative Statements of Net Position for MSD as of June 30, 2024.

(dollars in thousands)	June 30,		
		2024	
Reported in Statements of Net Position:			
Cash and cash equivalents			
Unrestricted	\$	55,863	
Restricted - current		23,366	
Restricted - noncurrent		629	
Total cash and cash equivalents		79,858	
Investments			
Unrestricted - current		60,002	
Unrestricted - noncurrent		48,369	
Restricted - current		11,052	
Restricted - noncurrent		64,381	
Total investments		183,804	
Total Cash, Cash Equivalents and Investments	\$	263,662	

Deposits:

As of June 30, 2024, MSD's depository bank is JP Morgan Chase. MSD's deposits are fully collateralized and/or covered by federal depository insurance. At June 30, 2024, the collateral pledged was a Letter of Credit from the Federal Home Loan Bank of Cincinnati under MSD's name. At June 30, 2024, the bank balance of MSD's demand account was \$28,831,216.

Investments:

As of June 30, 2024, MSD's investments include securities issued by the United States government and its agencies and instrumentalities, municipal securities, money market funds, corporate commercial paper and a certificate of deposit. Securities purchased by MSD are held in custody either by Bank of New York Mellon or Fifth Third Securities. The certificate of deposit is with Liberty Bank. Investments are reported at fair value as of June 30, 2024.

The following table presents information related to MSD's investments at June 30, 2024.

(dollars in thousands)			Weighted Average	Moody's Credit
	Reported	Value	Maturity in Years	Rating
U.S. treasury bills		11,994	0.002	Aaa
U.S. treasuries		80,811	0.990	Aaa
U.S. agency discount notes		8,107	0.004	Aaa
U.S. agency securities		37,808	1.100	Aaa
Commercial paper		2,362	0.340	P-1
Municipal bonds		42,622	0.720	Aa1
Money market funds		49,181	0.000	-
Cash		30,677	0.000	-
Certificate of deposit		100	0.630	-
Total cash, cash equivalents and investments	\$ 2	63,662	3.79	_
Accrued interest	\$	981		

Risks:

<u>Interest Rate Risk:</u> Interest rate risk is the risk that a change in market interest rates of fixed income securities will adversely affect the fair value of the investment. MSD minimizes interest rate risk by structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity. The weighted average maturity in years represents the interest rate risk for MSD. At June 30, 2024, the longest remaining maturity for any investment was approximately three years.

<u>Credit Risk:</u> Credit risk is the risk that an issuer of financial securities will not fulfill its obligations to the holder of the obligation. In accordance with Kentucky Revised Statues and MSD's investment policy, MSD manages credit risk by limiting its investments in state and local governments rated in one of the three highest categories by a competent rating agency. Restricted fund investments in state and local governments must be rated in one of the two highest rating categories. As of June 30, 2024, the lowest rated municipal security held by MSD was Aa1.

Concentration of Credit Risk: Concentration of credit risk for investments is the risk of loss attributable to the magnitude of an investment in a single issuer. MSD's investment policy requires that investments be diversified to eliminate the risk of loss from over-concentration of assets in a specific maturity, a specific issuer, or a specific class of securities. The policy limits the amount of money invested at any time in one or more categories of the investments authorized by Kentucky Revised Statute § 66.480 1e, 1f, 1g, and 1i shall not exceed 20% of the total amount invested. MSD was in compliance with its investment policy at June 30, 2024.

<u>Custodial Credit Risk:</u> Custodial credit risk is the risk that, in the event of the failure of a financial institution, MSD's deposits or collateral securities would not be returned to it. MSD considers the collateral provided by financial institutions with who it does business adequate to cover all deposits in excess of limits set forth by the Federal Deposit Insurance Corporation.

Fair Value Measurement:

GASB 72 requires MSD to disclose how we measure the fair value of investments and the underlying valuation techniques. Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for these securities or repurchase agreements. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing approach. Matrix pricing is used to value securities based on the securities' relationship to the benchmark quoted prices.

The following table summarizes MSD's investments subject to fair value measurements and valuation techniques as of June 30, 2024.

(dollars in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total	
Investments by fair value level:								
U.S. treasuries	\$	-	\$	92,805	\$	_	\$	92,805
U.S. agency discount notes	·	-	·	8,107	·	-	·	8,107
U.S. agency securities		-		37,808		-		37,808
Commercial paper		-		2,362		-		2,362
Municipal bonds				42,722		-		42,722
Total investments by fair value level	\$		\$	183,804	\$	_	\$	183,804

Restricted Cash and Investments:

Cash and investments are restricted for various purposes as specified by MSD's General Bond Resolution. The following table summarizes restricted cash and investments by purpose at June 30, 2024.

(dollars in thousands)	June 30, 2024			
Debt service reserve Debt service	\$	65,010 24,107		
Total restricted cash & investments	\$	89,117		

The General Bond Resolution sets a debt service reserve requirement equal to at least 10% of the face amount of all bonds issued under the resolution, 100% of the maximum aggregate net debt service in the current or any future fiscal year or 125% of the average aggregate net debt service in the current or any future fiscal year (the three-prong test). The General Bond Resolution allows, in lieu of cash and investments in that amount, a letter of credit or policy of bond insurance payable in the required amount. On June 26, 2019, MSD purchased a debt service reserve surety policy (the Reserve Policy) from Build America Mutual Assurance Company with a maximum policy limit of \$75,000,000. The Reserve Policy terminates on May 15, 2048. Draws under the Reserve Policy may only be used to make payments of principal and interest on the bonds. Cash and investments in the debt service reserve funds shall be transferred to the debt service funds for payment of debt service on the bonds before any draw may be made on the Reserve Policy.

The following table summarizes MSD's compliance with the debt service reserve requirement at June 30, 2023.

(dollars in thousands)	June 30, 2024		
Debt service reserve Reserve surety policy	\$	65,010 75,000 140,010	
Debt service reserve requirement	\$	139,614	

NOTE 3 - SCHEDULE OF NET POSITION

The following table summarizes the Schedule of Net Position as of June 30, 2024.

(dollars in thousands)	June 30, 2024
Net investment in capital assets: Plant, lines and other facilities net of depreciation including capitalized interest Outstanding debt that applies to plant, lines and other facilities Accounts payable and accrued expenses (capital) Deferred outflows and inflows of resources	\$ 3,903,754 (2,826,102) (48,188) 10,859
Total	1,040,323
Restricted for: Assets restricted for debt service Assets restricted for construction Liabilities associated with restricted debt service	89,117 10,311 (13,316) 86,112
Unrestricted net position	6,661
Total net position	\$ 1,133,096

NOTE 4 - CAPITAL ASSETS

Summarized Capital Assets

The following table summarizes MSD's capital assets as of June 30, 2024.

(dollars in thousands)	Beginning Balance	Transfers In/ Additions	Retirements / Reclassifications	Ending Balance
	Dalaricc	Additions	Teclassifications	Dalarice
Capital assets:				
Sewer lines	\$2,151,512	\$ 54,284	\$ (124)	\$2,205,672
Wastewater treatment facilities	864,008	29,262	(155)	893,115
Drainage facilities	1,078,913	53,557	(5,480)	1,126,990
Pumping and lift stations	298,862	20,773	(37)	319,598
Administrative facilities	53,173	16,214	-	69,387
Maintenance facilities	16,149	474	-	16,623
Machinery and equipment	103,576	2,905	(2,481)	104,000
Miscellaneous	59,461	191	-	59,652
Prepaid regulatory assets	443,393	12,749	-	456,142
Intangible subscription assets	8,934	2,464	-	11,398
Total capital assets	5,077,981	192,873	(8,277)	5,262,577
Less accumulated depreciation				
and amortization:				
Sewer lines	(459,806)	(28,024)	3	(487,827)
Wastewater treatment facilities	(477,081)	(31,517)	-	(508,598)
Drainage facilities	(267,312)	(23,760)	1	(291,071)
Pumping and lift stations	(140,985)	(15,287)	50	(156,222)
Administrative facilities	(44,340)	(1,320)	-	(45,660)
Maintenance facilities	(8,143)	(819)	-	(8,962)
Machinery and equipment	(75,225)	(9,777)	2,356	(82,646)
Miscellaneous	(34,966)	(5,592)	-	(40,558)
Prepaid regulatory assets	(160,350)	(11,064)	-	(171,414)
Intangible subscription assets	(2,841)	(1,675)	-	(4,516)
Total accumulated depreciation/amortization	(1,671,049)	(128,835)	2,410	(1,797,474)
Net capital assets in service	3,406,932	64,038	(5,867)	3,465,103
Construction in progress	309,372	262,543	(133,264)	438,651
Net capital assets	\$3,716,304	\$ 326,581	\$ (139,131)	\$3,903,754

Capital assets include non-depreciable assets for land related to all facilities and pumping and lift stations. The carrying value was \$45,980,778 at June 30, 2024.

Intangible Subscription Assets

MSD is a party to multiple subscription-based information technology agreements (SBITAs) which convey the contractual right-to-use another party's technology software for a period time in an exchange transaction. These intangible assets are recognized as capital assets.

The following table lists all future payments under the SBITAs as of June 30, 2024.

(dollars in thousands)			SBITA	Liability		
	Principal		Ir	Interest		Total
Year Ending June 30,						
2025	\$	2,352	\$	167	\$	2,519
2026		2,163		96		2,259
2027		992		32		1,024
2028	520			5		525
	\$	6,027	\$	300	\$	6,327

There are no outflows of resources in the reporting period for variable or other payments not included in the measurement of the subscription liability. There are no commitments under SBITAs before the commencement of the subscription terms.

Prepaid Regulatory Assets

In accordance with the provisions for regulated utility entities under GASB 62, MSD follows the practice of recognizing the interest incurred as part of the cost of acquiring assets that are debt-financed for rate-making purposes as a capital asset. Capitalized interest is presented as a prepaid regulatory asset. MSD depreciates capitalized interest over forty years. The following table summarizes capitalized interest and net interest expense reported in non-operating expenses at June 30, 2024.

(dollars in thousands)	J۱	une 30, 2024
Interest incurred Less interest capitalization	\$	109,191 (12,749)
Interest expense, net	\$	96,442

The following table summarizes prepaid regulatory assets and amortization at June 30, 2024.

(dollars in thousands)	
Gross prepaid regulatory assets - beginning of year Additions Gross prepaid regulatory assets - end of year	\$ 443,393 12,749 456,142
Accumulated amortization - beginning of year Amortization Accumulated amortization - end of year	(160,350) (11,064) (171,414)
Net prepaid regulatory assets - end of year	\$ 284,728

Impairment of Capital Assets:

In accordance with GASB Statement No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries, management evaluates prominent events or changes in circumstances affecting capital assets to determine whether impairment of a capital asset has occurred. Such events or changes in circumstances that may be indicative of impairment include evidence of physical damage, enactment or approval of laws or regulations, other changes in environmental factors, technology changes or evidence of obsolescence, changes in the manor of duration of use of a capital asset, and construction stoppage. A capital asset is generally considered impaired if both (a) the decline in service utility of the capital asset is large in magnitude and (b) the event or change in circumstance is outside the normal life cycle of the capital asset. No impairment losses were recognized in fiscal year 2024.

NOTE 5 - LONG-TERM DEBT

The following table summarizes MSD's long-term debt outstanding at June 30, 2024.

(dollars in thousands)					
Issue Description	Outstanding at Beginning of Year	Issued	Retired	Outstanding at End of Year	Payable Within One Year
Revenue bonds	\$2,204,310	\$ 385,112	\$ 139,955	\$ 2,449,467	\$ 53,985
Unamortized premium/discount	98,019	20,227	7,361	110,885	-
Commercial paper notes	165,000	2,498,755	2,451,560	212,195	7,325
Other subordinate debt:					
General obligation bonds	9,894	-	907	8,987	930
SRF loans	39,797	5,259	2,013	43,043	2,361
Financing note	1,700		175	1,525	185
Total	\$2,518,720	\$ 2,909,353	\$ 2,601,971	\$ 2,826,102	\$ 64,786

Revenue Bonds:

MSD's long-term revenue bonds are publicly issued under its General Bond Resolution adopted December 7, 1992 (and amended on March 4, 1993, June 30, 1993, December 14, 1994, and February 24, 2003), to pay at maturity program notes issued and outstanding as senior subordinated debt under a Program Note Resolution or to finance sewer and drainage projects. MSD has pledged all revenues to the payment of principal and interest on its outstanding revenue bonds. Pursuant to the General Bond Resolution, upon the occurrence of any event of default, a holder or holders of twenty percent in principal amount or more of the bonds then outstanding may apply to a Judge in the Circuit Court of Jefferson County to appoint a trustee to represent all Bondholders and the trustee may declare all bonds due and payable. MSD has remedies available under the Resolution to cure an event of default even after all bonds are declared due and payable.

Federal tax regulations generally require the periodic payment to the U.S. Treasury of investment earnings on the proceeds of an issue of tax-exempt municipal bonds to the extent those earnings exceed the yield on the bonds. Such payments, known as arbitrage rebate, are normally payable every fifth year following the issuance of a series of bonds and upon the retirement of the bond issue. MSD has arbitrage calculations performed as needed by an independent third party to comply with these regulations. As of June 30, 2024, MSD's accrued liability for arbitrage rebate associated with the Series 2021A bonds was \$989,143. This amount covers the third annual computation and does not represent the amount which may be due at the first installment period date of June 30, 2026. Additionally, during fiscal year 2024, \$52,178 was accrued

for arbitrage rebate associated with the Series 2023C bonds. This amount covers the first annual computation and does not represent the amount which may be at the first installment period date of May 15, 2028.

A pledged revenue debt service coverage ratio covenant has been established under the 1992 General Bond Resolution. MSD was in compliance with the ratio covenant as of June 30, 2024.

Significant Revenue Bond Transactions: On October 26, 2023, MSD issued \$351,975,000 of its tax-exempt sewer and drainage system revenue and refunding bonds, Series 2023C with a true interest cost of 4.55%. The proceeds of the Series 2023C bonds were used: to refund portions of the outstanding Series 2013B and Series 2020C bonds, to refund \$200,000,000 of outstanding commercial paper notes, to pay or reimburse the costs of construction and acquisition of the capital improvement program, to fund the required increase in the reserve account equal to the debt service reserve requirement, and to pay the costs of issuance of the 2023C bonds. The refunding of the Series 2013B and 2023C bonds reduced future debt service by \$2,825,635 and resulted in an economic gain of \$2,093,204. Payment of the Series 2023C bonds is secured by a senior lien pledge of net revenues. The final maturity of the Series 2023C bonds is on May 15, 2053.

On March 15, 2021, MSD issued under the General Bond Resolution, to the United States Environmental Protection Agency (EPA), its sewer and drainage system revenue bonds, Series 2020B, in the principal amount of \$96,926,900 (excluding capitalized interest) and at a fixed interest rate of 2.37%. The Series 2020B bonds evidence a loan from the EPA to MSD under the federal Water Infrastructure Finance and Innovation Act (WIFIA). EPA and MSD are parties to a WIFIA Loan Agreement (WLA). The loan finances up to 49% of the construction costs of the Morris Forman Water Quality Treatment Center Biosolids Processing project. The WLA allows for capitalization of interest through November 15, 2029. Capitalized interest is added to the principal amount of the loan. Payment of the Series 2020B bonds is secured by a senior lien pledge of net revenues. The final maturity of the Series 2020B bonds is on November 15, 2059. MSD's loan agreement with the EPA prohibits MSD from incurring additional debt without the permission of the EPA if a payment default has occurred and is continuing under the WIFIA loan agreement. Upon an event of default, MSD would pay interest on the outstanding balance of the Series 2020B bonds at an interest rate of 4.37%. MSD made an initial draw on the Series 2020B bonds of \$2,987,807 on December 1, 2023. As of June 30, 2024, the outstanding balance of the Series 2020B bonds was \$33,137,358 including \$94,104 of capitalized interest.

<u>Build America Bonds Program:</u> MSD has outstanding \$510,000,000 of sewer and drainage system revenue bonds (Series 2009C and Series 2010A) issued under the federal government's Build America Bonds Program. Under the program, the federal government pays a subsidy in the amount of 35% of the interest paid on the bonds. The interest subsidy received by MSD for the fiscal year ended June 30, 2024, was \$10,359,939. Subsidy payments to MSD were reduced by 5.7% in fiscal year 2024 due to the impacts of federal budget seguestration.

The following table summarizes revenue bonds payable at June 30, 2024.

llars in thousands) Revenue Bonds		Original ue Amount	Interest Rates	Final Payment <u>In</u>	Outstanding as of June 30, 2024	
2009C series revenue bonds	\$	180,000	5.98%	2040	\$	180,000
2010A series revenue bonds		330,000	6.25%	2043		330,000
2013B series revenue bonds		119,515	4.00% - 5.00%	2038		89,300
2014A series revenue bonds		80,000	4.00% - 5.00%	2045		77,280
2015A series revenue bonds		175,000	3.125% - 5.00%	2046		168,525
2015B series revenue bonds		81,750	2.63% - 5.00%	2038		59,865
2016A series revenue bonds		150,000	3.00% - 5.00%	2047		145,470
2016B series revenue bonds		28,315	2.00% - 5.00%	2036		16,585
2017A series revenue bonds		175,000	3.00% - 5.00%	2048		138,035
2017B series revenue bonds		35,725	5.00%	2025		13,505
2018A series revenue bonds		60,380	4.00%	2038		60,380
2020A series revenue bonds		225,000	2.00% - 5.00%	2050		221,355
2020B series revenue bonds		96,927	2.37%	2060		33,137
2020C series revenue bonds		112,065	0.29% - 2.65%	2044		37,790
2021A series revenue bonds		246,555	2.22%	2034		214,665
2022A series revenue bonds		225,000	2.63% - 5.00%	2052		223,500
2023A series revenue bonds		49,745	5.00%	2035		49,745
2023B series revenue bonds		41,950	5.00%	2036		41,950
2023C series revenue bonds		351,975	5.00%	2053		348,380
Total revenue bonds Add: unamortized premium/discount						2,449,467 110,885
Total bonds payable Less: current maturities						2,560,352 (53,985
Total bonds payable, long term portion	1				\$	2,506,367

The following table presents revenue bond debt service requirements after June 30, 2024 (including the remaining capitalized interest for the Series 2020B bonds of \$4,553,982).

(dollars in thousands)		Int	erest before	Fede	ral interest	Interest net		
	Principal subsidy subsidy		subsidy	of subsidy				
Year Ending June 30,								
2025	\$	53,985	\$	102,640	\$	(10,360)	\$	92,280
2026		54,535		100,312		(10,360)		89,952
2027		73,245		98,069		(10,360)		87,709
2028		71,825		94,459		(9,638)		84,821
2029		74,235		92,194		(9,638)		82,556
2030-2034		269,566		437,378		(50,520)		386,858
2035-2039		572,519		360,562		(51,103)		309,459
2040-2044		691,687		206,184		(21,465)		184,719
2045-2049		465,606		66,016		-		66,016
2050-2054		110,776		13,600		-		13,600
2055-2059		13,132		1,126		-		1,126
2060-2064		2,816		33				33
	\$	2,453,926	\$	1,572,573	\$	(173,444)	\$	1,399,129

The following table provides a summary of current and long-term revenue bond activity at June 30, 2024.

(dollars in thousands)	June 30, 2024
Revenue bonds - beginning of year Bonds issued Principal paid on bonds Bond refunding	\$ 2,204,310 385,112 (51,115) (88,840)
Revenue bonds - end of year	\$ 2,449,467

General Obligation Bonds:

MSD merged with the Oldham County Environmental Authority (OCEA) on June 30, 2020. Oldham County previously issued its County of Oldham general obligation bonds Series 2014, and general obligation Series 2017 refunding bonds, the proceeds of which financed the costs of various improvements to the sanitary sewer system owned by OCEA. The balance of the bonds outstanding at June 30, 2024, was \$8,986,552. MSD agreed to support Oldham County's payment of debt service for the supported bonds subject to the terms of an Assistance Agreement dated June 30, 2020. Upon the occurrence of an uncured event of default under the Assistance Agreement, Oldham County is entitled to exercise all remedies available at law or in equity.

The following table provides a summary of current and long-term general obligation bond activity as of June 30, 2024.

(dollars in thousands)				Final	
General Obligation Bonds		original e Amount	Interest Rates	Payment In	g as of June 30: 2024
2017 series general obligation bonds 2014 series general obligation bonds	\$	3,750 9,790	2.08% 3.00% - 3.20%	2030 2035	\$ 2,882 6,105
Total general obligation bonds Less: current maturities					 8,987 (930)
Total bonds payable, long term portion	า				\$ 8,057

The following table presents general obligation bond debt service requirements after June 30, 2024.

(dollars in thousands)		Gen	onds			
	Principal		In	terest		Total
Year Ending June 30, 2025 2026 2027 2028 2029 2030-2034 2035-2039	\$	930 957 983 1,004 1,029 3,439 645	\$	237 214 189 163 137 349	\$	1,167 1,171 1,172 1,167 1,166 3,788 655
	\$	8,987	\$	1,299	\$	10,286

Commercial Paper and Bank Notes:

<u>2023 Program Note Resolution</u>: On March 27, 2023, the MSD Board adopted a Program Note Resolution authorizing the issuance of one or more series of sewer and drainage system subordinated program notes in an aggregate principal amount not to exceed \$500,000,000 for the purpose of financing eligible sewer and drainage projects and to refund program notes or subordinate lien bond anticipation notes. Program notes issued under the Program Note Resolution are subordinate and junior in all respects to revenue bonds issued under the General Bond Resolution. Program notes are issued as senior subordinated debt secured on a parity with the bond anticipation notes.

MSD has issued two subseries of commercial paper notes under the Program Note Resolution: Series 2023A-1 with a maximum outstanding of \$250,000,000 and Series 2023A-2 with a maximum outstanding of \$250,000,000. Commercial paper notes may be issued and sold, at public or private sale, as taxable or tax-exempt notes, maturing in 270 days or less (but in any event not later than June 18, 2026) as determined by MSD, and bearing interest at a rate not in excess of 12% per annum for taxable notes or 10% per annum for tax-exempt notes. Commercial paper notes are payable only from proceeds of the sale of other commercial paper notes issued under the Program Note Resolution and used to refund outstanding commercial paper notes, the proceeds of direct purchase notes or other loans used to refund outstanding commercial paper notes, and the proceeds of revenue bonds issued to pay outstanding commercial paper notes.

Liquidity support for commercial paper Series 2018A-1 is provided by Bank of America, N.A (BANA) pursuant to a Revolving Credit Agreement dated June 1, 2023. BANA has provided a commitment of \$250,000,000 for the payment of the principal of and interest on the Series 2023A-1 notes. MSD and BANA entered into a Note Purchase Agreement dated June 1, 2023, providing for the purchase of direct purchase notes by BANA up to the aggregate principal amount of \$250,000,000. The BANA Revolving Credit Agreement and the BANA Note Purchase Agreement limit the aggregate principal amount of commercial paper notes Series 2023A-1 and the BANA direct purchase notes to \$250,000,000. BofA Securities, Inc. is acting as the dealer for Series 2023A-1 notes.

Liquidity support for commercial paper Series 2023A-2 is provided by JPMorgan Chase Bank, National Association (JPMCB) pursuant to a revolving credit agreement dated June 1, 2023. JPMCB has provided a commitment of \$250,000,000 for the payment of the principal of and interest on the Series 2023A-2 notes. MSD and JPMCB entered into a Note Purchase Agreement dated June 1, 2023, providing for the purchase of direct purchase notes by JPMCB up to the aggregate principal amount of \$250,000,000. The JPMCB Revolving Credit Agreement and the JPMCB Note Purchase Agreement limit the aggregate principal amount of commercial paper notes Series 2023A-2 and the JPMCB direct purchase notes to \$250,000,000. J.P. Morgan Securities LLC is acting as the dealer for Series 2018A-2 notes.

Upon the occurrence of any special event of default under the Revolving Credit Agreements and Note Purchase Agreements, the commitment shall immediately terminate with respect to all commercial paper notes and the banks shall have no obligation to make any loan or to fund any outstanding commercial paper note. Upon the occurrence of an event of default that is not a special event of default, the banks may, by notice to MSD, terminate the commitment, if any (except as provided below), deliver a notice of no-issuance to MSD and to the Issuing and Paying Agent directing the Issuing and Paying Agent to cease issuing all commercial paper notes. The available commitment shall immediately be reduced to the then outstanding principal amount of commercial paper notes plus the amount of interest to accrue on such notes and the available commitment shall be further reduced in a similar manner when commercial paper notes mature provided the commitment does not terminate, and the right of the bank to accelerate the maturity of the note and the loans shall not affect the obligation of the bank to make loans in aggregate principal amount equal to the commitment to the extent necessary for MSD to make required payments of principal on the commercial paper notes issued and sold prior to the date upon which the notice of no-issuance is received by the Issuing and Paying Agent; provided further that if any loans are made that would not have been made but for the application of the preceding provision, such loans shall be immediately due and payable on the date such loans are made.

Moody's Investors Service and Standard and Poor's Ratings Services assigned ratings of P-1 and A-1+, respectively, to the commercial paper notes on June 5, 2023.

Commercial paper notes of \$212,195,000 were outstanding as of June 30, 2024, in accordance with the respective 2023 Revolving Credit Agreements. Interest rates on the notes outstanding range from 3.5% to 3.8% and maturities were thirty days.

The following table summarizes the outstanding and available balance of the commercial paper program at June 30, 2024.

(dollars in thousands)						
Issue Description	Author	rized Amount	Amour	nt Outstanding	Unis	sued Portion
Series 2023A-1 Series 2023A-2	\$	250,000 250,000	\$	106,098 106,097	\$	143,902 143,903
Total	\$	500,000	\$	212,195	\$	287,805

Proceeds from the commercial paper notes outstanding at June 30, 2024, were used to pay off the 2022A Bond Anticipation Note at maturity. MSD plans to amortize these commercial paper notes over the same period as the amortization of the notional amount of the associated hedging derivative instruments. Commercial paper notes of \$7,325,000 will be paid down on May 15, 2025. The remainder of the outstanding commercial paper notes are classified as a non-current liability. See Note 6, Bond Anticipation Notes, and Note 7, Derivative Instruments, for additional information. The following table summarizes commercial paper program transactions for the year ended June 30, 2024.

(dollars in thousands)										
Issue Description	Outstanding Notes at Beginning of Year	Notes Issued	Notes Retired	Outstanding Notes at End of Year	Payable Within One Year					
Series 2023A-1	80,000	1,249,382	1,223,284	106,098	3,662					
Series 2023A-2	85,000	1,249,373	1,228,276	106,097	3,663					
Total	\$ 165,000	\$ 2,498,755	\$ 2,451,560	\$ 212,195	\$ 7,325					

State Revolving Fund Loans:

MSD utilizes funding provided through the Kentucky Infrastructure Authority's (KIA) State Revolving Fund (SRF). The SRF financing program provides low interest loans for infrastructure projects that are considered a priority based on the water pollution control criteria outlined in the Clean Water Act. MSD's SRF loans are considered direct placement debt and carry interest rates ranging between 1.75% and 3.8%. Under the assistance agreements entered with the KIA, upon the occurrence and continuance of any event of default, the Authority may declare all payments due at a default rate of 8%. Additionally, when an event of default occurs and is continuing, the Authority can declare all payments due, exercise all rights and remedies, take legal action to enforce its rights under the agreement, and submit a formal referral to the appropriate federal agency.

<u>Significant SRF Transactions:</u> As of June 30, 2024, MSD has expended \$7,400,000 in eligible project costs for loan number A17-028. The full amount of the loan has been drawn and the project is complete.

The following table shows outstanding SRF direct placement debt at June 30, 2024.

(dollars in thousands) Loan Number	Loan Amount	Drawn Amount	Interest Rate	Final Payment In	Outstanding at end of Year
A09-41	\$ 2,395	\$ 2,395	3.00%	2033	\$ 1,193
A10-04	2,843	2,843	2.00%	2033	1,420
A10-05	1,000	1,000	3.00%	2033	524
A10-07	2,538	2,538	2.00%	2034	1,332
A11-15	671	671	2.00%	2033	335
A12-29	6,500	6,500	1.75%	2037	4,323
A17-028	7,400	7,400	1.75%	2042	7,400
A18-010	1,116	1,116	1.75%	2040	948
A19-015	2,695	2,695	2.00%	2042	2,414
A19-028	24,200	24,200	2.00%	2042	22,700
B10-01	500	500	3.00%	2030	182
B10-04	500	500	3.00%	2031	210
B15-006	87	87	1.75%	2038	62
Total loans payable Less: current maturities Total loans payable, long	term portion				43,043 (2,361) \$ 40,682

KACO Financing Note:

Oldham County Fiscal Court, on behalf of OCEA, previously entered a note financing obligation with the Kentucky Association of Counties Trust in the amount of \$4,000,000 at an interest rate of 4.94% to finance various treatment facilities. MSD entered into an agreement with the County of Oldham Kentucky, as part of its merger with OCEA, on June 30, 2020, to make the remaining note payments when due. In the event of default, the Kentucky Association of Counties Trust may by written notice, take possession of the treatment facilities, sell or lease the treatment facilitates, or exercise any remedy available to it under applicable law. At June 30, 2024, the remaining principal balance is \$1,525,000. Final maturity is in 2031.

NOTE 6 – BOND ANTICIPATION NOTES

MSD issued bond anticipation notes (BAN) under its Subordinated Bond Resolution adopted April 26, 2010. Bonds issued under the Subordinated Resolution are superior in priority to all revenue debt of MSD except bonds issued under the General Bond Resolution. Pursuant to the Subordinated Resolution, upon the occurrence and continuance of any event of default, the paying agent may or the holders of more than fifty percent in principal amount of outstanding notes may, by notice delivered to MSD, declare the principal and interest of all notes immediately due and payable. MSD has remedies under the resolution to cure the event of default and annul the declaration of acceleration.

MSD first publicly offered and issued a \$226,340,000 BAN to partially refund its then outstanding sewer and drainage system revenue bonds, Series 1999A and a portion of its Series 1997A and 1998A revenue bonds on August 19, 2009. The BAN was reissued annually through September 28, 2022. On October 6, 2023, MSD paid off the 2022 BAN with \$7,145,000 of unrestricted cash and \$219,195,000 of commercial paper proceeds. Total BAN outstanding at June 30, 2024, was \$0.

The following table summarizes changes in the BAN during fiscal year 2024.

(dollars in thousands)	Outstanding			Outstanding	Payable
Issue Description	at Beginning of Year	Issued	Retired	at End of Year	Within One Year
2022 Bond anticipation notes	226,340		226,340		
Total	\$ 226,340	\$ -	\$ 226,340	\$ -	\$ -

NOTE 7 - DERIVATIVE INSTRUMENTS

The following table presents MSD's interest rate derivatives outstanding at June 30, 2024.

(dollars in th	nousands)				NI-4' I			
Derivative Instrument	<u> Type</u>	<u>Objective</u>	<u>Counterparty</u>	Original <u>Notional</u>	Notional Amount 6/30/2024	Effective <u>Date</u>	Termination <u>Date</u>	<u>Terms</u>
A	Pay-fixed interest rate swap	Hedge interest rate risk	Wells Fargo, N.A.	\$ 180,716	\$ 169,756	6/15/2013	5/15/2033	Pay 4.4125% Receive 67% USD- 1M SOFR Pay 4.4125%
В	Pay-fixed interest rate swap	Hedge interest rate risk	Bank of America, N.A.	\$ 56,433 237,149	\$ 42,439 212,195	11/16/2009	5/15/2033	Receive 67% USD- 1M SOFR

MSD originally entered into interest rate swap agreements as a hedging derivative instrument to lock in long-term interest rates in advance of issuing long-term debt. Two interest rate swap agreements remain in MSD's derivative instrument portfolio that serve as an interest rate hedge for the expected issuance of debt associated with refinancing the BAN originally issued on August 19, 2009. The swaps are structured so that the notional amounts of the agreements decrease over time corresponding with the planned amortization of the underlying debt.

Interest rate swaps are classified as hedging derivative instruments if they meet the criteria outlined in GASB 53 or as investment derivative instruments if they do not. MSD has designated its interest rate swaps as hedging derivatives under GASB 53 as of July 1, 2019. At June 30, 2024, MSD's interest rate derivatives are effective cash flow hedges and were classified as hedging derivatives in its financial statement. The fair value of the at-market portion, the hedging derivative, is reported as other assets and deferred inflows if positive and other liabilities and deferred outflows if negative on the Statements of Net Position. The difference between the fair value of the at-market hedging derivatives and the fair value of the interest rate swaps is reported as investment derivatives on the Statements of Net Position. All changes in fair value of the derivatives are recorded as a separate component of non-operating revenue (expense).

Both swaps have termination dates of May 15, 2033. Payments are due on the fifteenth of each month. MSD receipt terms are 67% of the 30-day London Inter-Bank Offered Rate (LIBOR) or the replacement rate. MSD adhered to the 2020 IBOR Fallbacks Protocol on January 17, 2023. LIBOR will be replaced with 30-day Secured Overnight Financing Rate (SOFR) in MSD's derivative contracts following the cessation of 30-day LIBOR. The following table presents a summary of the change in fair value of the derivative instruments for the year ended June 30, 2024.

(dollars in thousands)	June 30, 2024
Fair value - beginning of year Change in fair value	\$ (27,247) 6,043
Fair value - end of year	\$ (21,204)

The following table presents fair values for the non-credit adjusted, at-market portion of the derivatives at June 30, 2024.

(dollars in thousands)	June 30, 2024		
Derivatives (at-market)	Clean	Accrued	
1999-1 - \$180.7M 67% LIBOR fixed payer 1999-2 - \$56.4M 67% LIBOR fixed payer	\$ (14,650) (3,660)	\$ (141) (30)	
Total	\$ (18,310)	\$ (171)	

The following table provides classification of the at-market portion and investment portion of the derivatives at June 30, 2024.

(dollars in thousands)	0			-	f 1 00	0004
	Changes in Fair	value	•	Fair Value	as of June 30,	2024
Governmental Activities	Classification	Α	mount	Classification	Amount	Notional
Cash flow hedges:						
Pay-fixed interest rate swaps	Deferred inflows	\$	1,034	Other liabilities Accrued interest	\$ (21,204) (63) \$ (21,267)	\$ 212,195
Investment derivatives:						
Pay-fixed interest rate swaps	Non-operating expenses	\$	5,009 6,043			

Valuation Techniques:

The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

Non-performance risk was measured using credit spreads implied by the credit rating for debt issues by entities with similar credit characteristics. This is the best method available under current market conditions since MSD has no credit default swaps that actively trade in the marketplace. For a derivative asset, the adjustment for non-performance risk of counterparties is determined by analyzing counterparty-specific credit default swaps, if available. If not available, credit default swaps in the market for entities of similar type and rating are used with information found in various public and private information services. This analysis is used to construct a credit curve that is applied to the discount curve on the net settlement payments of the derivative. A level two (2) category hierarchy was employed for fair valuation measurement. The positive and negative fair values of the swap agreements were provided by a third-party financial advisor.

Risks:

<u>Credit Risk:</u> Credit risk is the risk that a swap counterparty will not fulfill its obligations to MSD. MSD has implemented steps to safeguard it against the risks associated with the swap transactions. If the swap counterparties do not maintain A1/A+ ratings from Moody's Investors Service and Standard and Poor's Rating Service, the swaps contain provisions that require them to be marked to market weekly with monthly statements sent to MSD and the value will be collateralized with U.S. Treasury and Agency securities with the securities held by a tri-party custodian approved by MSD. All costs of collateralization will be borne by

the downgraded party who must post the collateral. In addition, the swaps were awarded to multiple firms to further mitigate the credit risk associated with the transactions.

The following table presents credit ratings of the counterparties to MSD's derivative instruments as of June 30, 2024.

	Standard &
Moody's	Poor's
P-1	A-1
P-1	A-1
	P-1

The agreements also provide for automatic termination if MSD's unenhanced bond rating is downgraded below BBB/Baa. MSD's obligations under its outstanding swap agreements are unsecured and subordinate to all bonds issued and outstanding.

The credit adjusted at-market portion, the accrued interest portion and off-market fair value of derivative instruments A and B are in liability positions of \$18,310,742, \$171,519 and \$2,893,549, respectively, at June 30, 2024. The aggregate fair value is negative \$21,266,818 (gross of implied note outstanding balance as of June 30, 2024). This represents the maximum loss that would be recognized at the reporting date if one or both swap counterparties failed to perform as contracted. There is no posted collateral to net against the fair value.

The contracts for derivative instruments A and B are held by Wells Fargo, N.A. and Bank of America, N.A., respectively, and comprise 100% of the net exposure to credit risk.

<u>Termination Risk:</u> Termination risk is generally referred to as the risk that a derivative instrument could be terminated causing MSD to owe a termination payment as a result of any of several events, which may include: a ratings downgrade of the swap counterparty; covenant violations by either party; bankruptcy of either party; a swap payment default of either party; and other default events as defined by the derivative instrument. Any such termination may require MSD to make significant termination payments in the future. The approximate amount of termination payment that MSD would have to pay if each of the derivative instruments were terminated on June 30, 2024, is approximately \$21,266,818. It should be noted that this is the non-credit adjusted (non GASB 72) mark-to-market valuation as of last business day of the fiscal year. The provisions of the agreements related to each derivative instrument allow for the offset of certain reimbursable costs related to the termination process.

To further mitigate the effect of termination risk relative to derivative instruments A and B, the agreements contain certain safeguards which include collateral posting requirements as discussed in the preceding Credit Risk section and, except for certain types of termination events, there is no automatic early termination.

Derivative instruments A and B may be terminated, if the underlying rating of MSD's obligations that are subject to annual appropriation falls below "BBB" from Standard and Poor's Ratings Service or below "Baa2" from Moody's Investors Service.

While there is no optional termination language in the confirmations of derivative instruments A and B, Wells Fargo, N.A. and Bank of America, N.A., respectively, may accommodate MSD to terminate the derivative instruments early, subject to credit approval.

If, at the time of termination, a swap has a negative fair value, MSD could be liable to the counterparty for a payment equal to the derivative instrument's fair value. If any of the derivative instruments are terminated, either the associated variable rate bonds would no longer be hedged with a synthetic fixed interest rate, or

the nature of the basis risk associated with the derivative instrument may change. As of June 30, 2024, MSD is not aware of any pending event that would lead to a termination event with respect to any of its existing derivative instruments, which are in force and effect as of such date.

<u>Basis Risk:</u> Basis risk is the risk that arises when an interest rate hedge is imperfect. Each of the derivative instruments is associated with certain debt obligations. The debt associated with each of the derivative instruments pays interest at variable interest rates. MSD receives variable payments under the derivative instrument. To the extent these variable payments are not equal to the variable interest payments on the associated debt there may be either a net loss or net benefit to MSD. The net swap payments made by MSD in fiscal year 2024 were \$1,706,138.

Rollover Risk: Rollover risk occurs when the term of the derivative instrument is not coincident with the repayment term of the underlying debt obligation. Derivative instruments A and B have terms equal to the critical terms of the hedged interest rate exposure.

<u>Interest Rate Risk:</u> Interest rate risk is the risk that a change in interest rates will reduce the value of an investment or position. MSD is exposed to interest rate risk on its interest rate derivative instruments. There may be either a net loss or net benefit to MSD depending upon decreases or increases in the applicable yield curve.

Terminations:

Upon a termination of a swap, any termination receipt or payment is amortized into income or expense until the original expiration date of that swap. Any unamortized portion of the receipt or payment is recorded as a deferred debit or credit in long-term liabilities. MSD has swap agreement terminations with deferred inflow of resources balances accreting to non-operating revenue as follows:

- In April 2006, MSD entered into a swap agreement with Deutsche Bank AG for an initial notional amount of \$171,405,000 which provided that beginning May 15, 2006, a net payment will be made based on MSD paying 78.78% of the 3-month LIBOR index on the notional amount and receiving 73.45% of the 5-year LIBOR Index on the notional amount. On January 23, 2008, MSD terminated this swap agreement and received a termination payment of \$4,170,000 that was amortized through December 2023, the termination date of the original agreement.
- On January 25, 2008, MSD terminated a twenty-seven-year floating to floating (basis) interest rate swap agreement with a notional amount of \$282,165,000. MSD entered into this agreement with Morgan Stanley in April 2006 and paid 67% of the 1-month LIBOR index and received 62.2% of the 5-year LIBOR index. The termination of this swap agreement resulted in the receipt of a payment in the amount of \$5,756,000. This payment will be amortized annually into income until April 2033, the termination date of the original agreement.

NOTE 8 - RISK MANAGEMENT

MSD is exposed to various risks of loss related to torts; theft of damage to and destruction of assets; errors and omissions; natural disasters; and injuries to MSD's employees. These risks are provided for through the insurance programs described below.

Self-Insurance – Group Liability:

MSD participates in the Louisville Area Governmental Self-Insurance Trust (LAGIT). LAGIT, which is certified by the Kentucky Department of Insurance to practice as a group liability self-insurance trust, was created on January 1, 1987. LAGIT members currently include Louisville Metro Government, six smaller cities, and six government agencies. LAGIT was formed to provide better risk protection and lower cost liability insurance by sharing the risk with all its members. MSD's payments to LAGIT are reflected on the financial statements as an expense. LAGIT provides, after a \$300,000 deductible, various liability coverages up to \$5,000,000 per occurrence. The amount of coverage available to MSD could be limited by

the total assets of LAGIT and/or claims of other members under the excess insurance policy. No claims were paid in fiscal year 2024 that exceeded the \$300,000 self-insured retention with LAGIT.

MSD maintained additional excess liability coverage for fiscal year 2023. Allied World National Assurance Company (A) provided \$5,000,000 of excess liability coverage beyond the \$5,000,000 provided through LAGIT. The Princeton Excess & Surplus Lines Insurance Company (A+) provided another \$5,000,000 of excess liability coverage beyond \$10,000,000. In total, MSD maintained liability coverage of \$15,000,000. No claims were made on either policy in fiscal year 2023.

Workers Compensation Insurance:

MSD has chosen to self-insure the basic worker's compensation insurance. Claims administration is handled by a third-party administrator and includes claims monitoring, check issuance, settlement negotiations, and loss control services. Liabilities are reported when it is probable that a loss has occurred, and the amount of the loss can be reasonably estimated. A separate insurance policy provides maximum coverage of \$1,000,000 per occurrence and aggregate. The liability for workers' compensation claims is included with accrued salaries and related benefits on the Statements of Net Position. The following table summarizes workers' compensation claim activity during fiscal year 2024.

(dollars in thousands)	June 30,	
		2024
Liability - beginning of year Claims and changes in estimates Payments	\$	1,902 359 (759)
Liability - end of year	\$	1,502

Self-Insurance – Property:

MSD joined the Louisville Area Governmental General Insurance Trust (LAGGIT) in September 2002. LAGGIT was created to provide lower cost to participants and broader coverage for property risks. MSD is responsible for covered property damage up to \$100,000 except for flood and vehicle collision coverage, which have separate deductibles. LAGGIT provides coverage for the next \$1,000,000 per occurrence, except for Flood Zone A locations. An excess insurance policy with a third-party carrier covers claims more than \$1,100,000. No claims were made under the LAGGIT policy in fiscal year 2024.

NOTE 9 - DEFERRED COMPENSATION

MSD offers its employees deferred compensation plans created in accordance with Internal Revenue Service Code Sections 401(k) and 457. These plans, available to all MSD employees, permit them to defer the payment of a portion of their salary until future years. Participation in these plans is voluntary and MSD makes no contributions to these plans on behalf of the employee. The deferred compensation is not available to employees until termination, retirement, death, or unforeseen emergency. All amounts of compensation deferred, including the investments and earnings thereon, vest with the employee and are not subject to the claims of MSD's general creditors.

NOTE 10 - COMMITMENTS AND CONTINGENCIES

Consent Decree:

On August 12, 2005, MSD agreed to enter a consent decree with the Commonwealth of Kentucky's Environmental and Public Protection Cabinet (KEPPC) and the U.S. Environmental Protection Agency (EPA). The consent decree called for MSD to submit a final Long-Term Control Plan (LTCP) to the KEPPC and EPA for review and joint approval. The final Sanitary Sewer Discharge Plan (SSDP) and the LTCP were certified on December 19, 2008, under the title of the Integrated Overflow Abatement Plan (IOAP).

The SSDP included schedules and deadlines for capital projects to be completed by the end of 2024. The LTCP included schedules, and deadlines for combined sewer overflow projects to be completed by December 31, 2020. MSD agreed to pay a civil penalty to the Commonwealth of Kentucky in the amount of \$1,000,000 to resolve the violations alleged in the KEPPC's and EPA's complaints up through the date of entry of the consent decree. The agreement called for MSD to perform supplemental environmental projects at an amount of not less than \$2,250,000. MSD neither admitted nor denied the alleged violations but acknowledged that discharges occurred and accepted the obligations imposed in the consent decree.

On April 10, 2009, MSD agreed to enter an amended consent decree with the KEPPC and the EPA. The amended consent decree resolved all pending claims of violations of the Federal Water Pollution Control Act and the Water Quality Act of 1987. The amended consent decree superseded and replaced the original consent decree entered on August 12, 2005. The amended consent decree contains stipulated penalties for MSD's failure to comply with the provisions contained therein. The IOAP was amended in 2012 and 2014 to improve compliance and adjust capital project schedules. To date, MSD has complied with all submittal and report requirements contained in the amended consent decree.

In 2019, MSD proactively approached Federal and state regulators to renegotiate the time to complete the remaining LTCP and SSDP projects required by the amended consent decree to reprioritize capital dollars for rehabilitation of MSD's aging biosolids systems, failing sewer interceptors and flood protection system rehabilitation. MSD, along with KEPPC and EPA, negotiated the second amended consent decree which grants a time extension for completing the remaining LTCP and SSDP projects to 2035. In exchange, MSD agreed to invest a minimum of \$25,000,000 annually for asset management projects through 2035. Additionally, MSD agreed to incorporate \$70,000,000 for critical sewer rehabilitation in its 5-year capital improvement plan. These financial commitments are achievable within the MSD Board's rate increase authority of 6.9% per year. The United States District Court granted final approval of the second amended consent decree on September 14, 2022. MSD estimates total capital expenditures associated with complying with the requirements of the second amended consent decree could range from \$2,000,000,000 to \$2,200,000,000. As with any estimate, the actual costs incurred could differ materially.

Claims and Litigation:

MSD is a defendant in various active lawsuits. Although the outcome of these lawsuits is not presently determinable, it is the opinion of the MSD's management that resolution of these matters will not have a material adverse effect on the financial statements of MSD. All material claims and litigation settlements that are both probable and reasonably measurable are recorded in accounts payable.

Other Commitments:

MSD is committed under various contracts for completion of construction or acquisition of utility plant and equipment. Outstanding contractual commitments related to the capital improvement program as of June 30, 2024, were \$520,968,039. These commitments will be paid for with bond proceeds, commercial paper, grants, and future pay-as-you-go revenues.

On January 1, 2022, MSD entered into an agreement with Louisville Water Company to provide customer billing services through December 31, 2027. The remaining cost of the contract including the portion of the contract treated as a SBITA at June 30, 2024, is \$27,517,302.

NOTE 11 - SUBSEQUENT EVENTS

Rate Increase:

On August 1, 2024, MSD's rates for wastewater and drainage service charges increased by 6.9% for Jefferson County customers. Wastewater volume rates increased 5% for Oldham County customers.

KIA Loan A23-007:

On August 19, 2024, MSD entered into a loan Assistance Agreement (A23-007) with the Kentucky Infrastructure Authority for the Paddy's Run Flood Pumping Station Capacity project. The total amount of the loan shall not exceed \$27,783,547. Interest is payable semi-annually at a fixed rate of 0.50% per annum

commencing after funds are first drawn on the loan. The loan shall be repaid over a period not to exceed 20 years from the date of initiation of operation for the project.

On August 26, 2024, MSD accepted a conditional commitment from the Kentucky Infrastructure Authority to increase the amount of loan A23-007 to \$54,006,047. MSD has not yet executed an Assistance Agreement for the loan increase.

Series 2024A Bonds

On August 20, 2024, MSD issued \$104,280,000 of its tax-exempt sewer and drainage system revenue and refunding bonds, Series 2024A. The proceeds of the Series 2024A bonds were used, together with other available funds, to currently refund all the outstanding principal of the Series 2013B bonds, currently refund a portion of the outstanding Series 2014A bonds, and to pay the costs of issuance of the 2024A bonds. The final maturity of Series 2024A bonds is in 2039. The refunding reduces debt service payments over the next fifteen years by \$11,234,709 which is a net present value savings of \$8,946,565.

Commercial Paper Program:

Commercial paper notes of \$242,195,000 are outstanding as of October 29, 2024, in accordance with the respective Revolving Credit Agreements. Interest rates on the notes outstanding range from 3.22% to 3.25% and maturities range from 30 to 32 days. MSD intends to reissue the remaining commercial paper notes at maturity in accordance with the refinancing terms of the Revolving Credit Agreements.

NOTE 12 - DEFINED BENEFIT PENSION AND OTHER POST-EMPLOYMENT BENEFITS PLAN - COST SHARING

General Information about the Pension and OPEB Plan:

All full-time and eligible part-time employees of MSD participate in County Employee Retirement System (CERS), a cost-sharing, multiple-employer defined benefit pension plan administered by the Kentucky Public Pension Authority (KPPA, the system), an agency of the Commonwealth. Under the provisions of Kentucky Revised Statute § 78.782 and § 61.645, the Board of Trustees (the Board) of KPPA administers CERS, Kentucky Employee Retirement System, and State Police Retirement System. Although the assets of the systems are invested as a whole, each system's assets are accounted for separately; invested according to plan-specific asset allocation goals; and are used only for the payment of benefits to the members of that plan and a pro rata share of administrative costs, in accordance with the provisions of Kentucky Revised Statue § 78.632, 613571, and 16.555.

The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may also be extended to beneficiaries of plan members under certain circumstances. Under the provisions of Kentucky Revised Statute § 61.701, the Board of KPPA also administers the Kentucky Retirement System's Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KPPA. The assets of the insurance fund are invested as a whole. KPPA and the Commonwealth have statutory authority to determine Plan benefits and employer contributions.

KPPA issues a publicly available financial report that includes financial statements and required supplementary information for CERS. The report may be obtained by writing to Kentucky Public Pension Authority, 1260 Louisville Road, Frankfort, Kentucky 40601, or it may be found at the KPPA website at www.kyret.ky.gov.

Basis of Accounting:

For purposes of measuring the net pension and other post-employment benefits plan (OPEB) liabilities, deferred outflow of resources and deferred inflow of resources related to pensions and OPEB, pension and OPEB expense, information about the fiduciary net position of CERS and additions to/deductions from CERS's fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Pension Benefits Provided:

The information below summarizes the major retirement benefit provisions of CERS-nonhazardous. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Members whose participation began before 8/1/2004:

Age and Service Requirement: Age 65 with at least one month of nonhazardous duty service credit, or at any age with 27 or more years of service credit.

Benefit:

If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service depending on participation and retirement dates. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004, but before 9/1/2008:

Age and Service Requirement: Age 65 with at least one month of nonhazardous duty service credit, or at any age with 27 or more years of service credit.

Benefit:

If a member has at least 48 months of service, the monthly benefit is 2.00% multiplied by final average compensation, multiplied by years of service. Final compensation is calculated by taking the average of the highest five (5) fiscal years of salary. If the number of months of service credit during the five (5) year period is less than forty-eight (48), one (1) or more additional fiscal years shall be used. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 9/1/2008, but before 1/1/2014:

Age and Service Requirement: Age 65 with 60 months of nonhazardous duty service credit, or age 57 if age plus service equals at least 87.

Benefit:

The monthly benefit is the following benefit factor based on service credit at retirement plus 2.00% for each year of service greater than 30 years, multiplied by final average compensation, multiplied by years of service.

Service Credit	Benefit Factor
10 years or less	1.10%
10+ - 20 years	1.30%
20+ - 26 years	1.50%
26+ - 30 years	1.75%

Final compensation is calculated by taking the average of the last (not highest) five (5) complete fiscal years of salary. Each fiscal year used to determine final compensation must contain twelve (12) months of service credit.

Members whose participation began on or after 1/1/2014:

Age and Service Requirement: Age 65 with 60 months of nonhazardous duty service credit, or age 57 if age plus service equals at least 87.

Benefit:

Each year that a member is an active contributing member to the System, the member contributes 5% of creditable compensation, and the member's employer contributes 4.00% of creditable compensation, which is a portion of the total employer contribution, into a hypothetical account. The hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the prior year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

OPEB Benefits Provided:

The information below summarizes the major retirement benefit provisions of CERS-nonhazardous. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Insurance Tier 1: Participation began before 7/1/2003

Benefit Eligibility: Recipient of a retirement allowance

Benefit:

The percentage of member premiums paid by the retirement system are dependent on the number of years of service. Benefits also include duty disability retirements, duty death in service, non-duty death in service and surviving spouse of a retiree.

Insurance Tier 2: Participation began on or after 7/1/2003, but before 9/1/2008

Benefit Eligibility: Recipient of a retirement allowance with at least 120 months of service at retirement

Benefit:

The system provides a monthly contribution subsidy of \$10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. Benefits also include duty disability retirements, duty death in service and non-duty death in service.

Insurance Tier 3: Participation began on or after 9/1/2008

Benefit Eligibility: Recipient of a retirement allowance with at least 180 months of service at retirement

Benefit:

The system provides a monthly contribution subsidy of \$10 for each year of earned service. The monthly contribution is increased by 1.5% each July 1. Benefits also include duty disability retirements, duty death in service and non-duty death in service.

Contributions:

MSD is required to contribute at an actuarially determined rate determined by Statute. Per Kentucky Revised Statute § 78.545(33) normal contribution and past service contribution rates shall be determined by the KPPA Board based on an annual valuation last preceding July 1 of a new biennium. The KPPA Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined based on a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the KPPA Board.

For the fiscal year ended June 30, 2024, participating CERS employers contributed 23.34% (23.34 % allocated to pension and 0.00% allocated to OPEB) of each nonhazardous employee's creditable compensation. These percentages are inclusive of both pension and insurance payments for employers. Administrative costs of KPPA are financed through employer contributions and investments earnings.

MSD has met 100% of the contribution funding requirement for the fiscal year ended June 30, 2024. Total contributions recognized by the Plan were \$13,946,881 (\$13,946,881 related to pension and \$0 related to OPEB). The OPEB contribution amount does not include the implicit subsidy reported in the amount of \$843,134.

Members whose participation began before 9/1/2008:

Nonhazardous member contributions equal 5% of all creditable compensation. Interest paid on the members' accounts is currently 2.5%; and per statute shall not be less than 2.0%. Members are entitled to a full refund of contributions with interest.

Members whose participation began on or after 9/1/2008, but before 1/1/2014:

Nonhazardous member contributions equal to 6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KPPA 401(h) Account. Interest paid on the members' accounts will be set at 2.5%. Members are entitled to a full refund of contributions and interest in their individual account, however, the 1% contributed to the insurance fund is non-refundable.

Members whose participation began on or after 1/1/2014:

Nonhazardous member contributions equal to 6% of all creditable compensation, with 5% being credited to the member's account and 1% deposited to the KPPA 401(h) Account. Members are entitled to a full refund of contributions and interest on the member's portion of the hypothetical account, however, the 1% contributed to the insurance fund is non-refundable.

Pension Plan Information:

<u>Total Pension Liability:</u> The total pension liability (TPL) was determined by an actuarial valuation as of June 30, 2022. The TPL was rolled forward from the valuation date to the plan's fiscal year ended June 30, 2023, using generally accepted actuarial principles.

Assumptions:

The CERS and KRS Board of Trustees adopted new actuarial assumptions on May 9, 2023, and June 5, 2023, respectively. Based on the June 30, 2021, actuarial valuation report, the actuarial methods and assumptions used to calculate these contributions rates are:

Investment return 6.25% Inflation 2.30%

Salary increases 3.30% to 10.30%, varies by service

Payroll growth 2.00%

Mortality System-specific mortality table based on mortality experience

from 2013-2018, projected with the ultimate rates from MP-2014

mortality improvement scale using a base year of 2019.

Discount rate assumptions:

(a) Discount Rate: A single discount rate of 6.50% was used to determine the TPL for the fiscal year ending June 30, 2023. The single discount rate increased by 0.25% from 6.25% in fiscal year 2022 to 6.50% in fiscal year 2023. The single discount rate was based on the expected rate of return on pension plan investments. Based on the stated assumption and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all future benefit payments of the current plan members. Therefore, The expected rate of return on pension plan investments was applied to all period of the projected benefit payments to determine the total pension liability.

- (b) Projected Cash Flows: The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employe contributions made each future year. Except where noted below, future contributions are projected assuming that the entire actuarially determined employer contribution is received by each plan future year, calculated in accordance with the current funding policy. The assumed future employer contributions for the CERS plans reflect the provisions of House Bill 362 (passed during the 2018 legislative session) which limit the increase to the employer contribution rates to 12% over the prior fiscal year through June 30, 2028.
- (c) Assumed Asset Allocation: The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table.

	Tauret	Long Term
	Target	Expected Real
Asset Class	Allocation	Rate of Return
Public equity	50.00%	5.90%
Private equity	10.00%	11.73%
Core fixed income	10.00%	2.45%
Specialty credit	10.00%	3.65%
Cash	0.00%	1.39%
Real estate	7.00%	4.99%
Real return	13.00%	5.15%
Total	100.00%	

The long-term expected rate of return on pension plan assets was established by the KPPA Board of Trustees at 6.25% based on a blending of the factors described above.

(d) Sensitivity Analysis: This paragraph requires disclosure of the sensitivity of the net pension liability (NPL) to changes in the discount rate. The following table presents MSD's allocated portion of the NPL of the System, calculated using the discount rate of 6.50%, as well as what MSD's allocated portion of the NPL would be if it were calculated using a discount rate that is one percentage-point lower (5.50%) or 1 percentage-point higher (7.50%) than the current rate.

Current					
1% Decrease Discount Rate		1%	Increase		
(5.50%)	(6.50%)		5.50%) (6.50%) (7.50%)		7.50%)
\$ 151.469	\$	119 970	\$	93,792	
(,		(5.50%)	1% Decrease Discount Rate (5.50%) (6.50%)	1% Decrease Discount Rate 1% (5.50%) (6.50%) (7	

Employer's Portion of the Collective NPL: MSD's proportionate share of the NPL, as indicated in the prior table, is \$119,969,522 or approximately 1.87%, an increase of 0.04% from fiscal year 2022. The NPL was distributed based on 2023 actual employer contributions to the plan.

<u>Measurement Date:</u> The total pension liability, net pension liability, and sensitivity information shown in this report are based on an actuarial valuation date of June 30, 2022. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2023, using generally accepted actuarial principles.

<u>Changes in Assumptions and Benefit Terms:</u> The CERS and KRS Board of Trustees adopted new actuarial assumptions on May 9, 2023, and June 5, 2023, respectively.

<u>Changes Since Measurement Date:</u> There were no changes that would materially impact the TPL between the measurement date of the collective NPL and the employer's reporting date.

<u>Pension Expense:</u> MSD was allocated pension expense of (\$5,327,611) related to the CERS for the year ending June 30, 2024.

<u>Deferred Outflows and Deferred Inflows:</u> Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense, they are labeled as deferred inflows. If they will increase pension expense, they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive System members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five-year period. Deferred inflows and outflows as of the measurement date include:

(dollars in thousands)	Deferred Outflow of Resources		Deferred Inflow of Resources	
Difference between expected and actual experience Change of assumptions Differences between expected and actual investment expoerience	\$	6,211 - -	\$	326 10,995 1,637
Changes in proportion and differences between contributions Contributions subsequent to the measurement date		1,758 7,969 13,947		2,570 15,528
Total	\$	21,916	\$	15,528

Deferred outflows of resources resulting from employer contributions subsequent to the measurement date of \$13,946,881 will be recognized as a reduction of NPL in the year ending June 30, 2025. The remainder of the deferred outflows and deferred inflows of resources are amortized over two to four years with remaining amortization as follows:

(dollars in thousands)	
Year Ending June 30:	
2024	\$ (5,284)
2025	(3,792)
2026	2,678
2027	(1,161)
	\$ (7,559)

<u>Pension Plan Fiduciary Net Position:</u> Detailed information about the pension plan's fiduciary net position is available in the separately issued pension plan financial reports.

OPEB Information:

<u>Total OPEB Liability:</u> The total other post-employment benefits plan (OPEB) was determined by an actuarial valuation as of June 30, 2022. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2023 using generally accepted actuarial principles.

Assumptions:

The actuarially determined contribution rates effective for fiscal year ended 2023 were calculated as of June 30, 2021. Based on the June 30, 2021, actuarial valuation reports, the actuarial methods and assumptions used to calculate the require contributions are:

Investment return 6.25% Inflation 2.30%

Salary increases 3.30% to 10.30%, varies by service

Payroll growth 2.00%

Mortality System-specific mortality table based on mortality experience

from 2013-2018, projected with the ultimate rates from MP-2014

mortality improvement scale using a base year of 2019.

Healthcare trend rates:

Pre-65 Initial trend starting at 6.30 % at January 1, 2023, and gradually

decreasing to an ultimate trend rate of 4.05% over a period of 13

years.

Post-65 Initial trend starting at 6.30% at January 1, 2023, and gradually

decreasing to an ultimate trend rate of 4.05% over a period of 13

years.

Discount rate assumptions:

(a) Discount Rate: The single discount rate used to measure the total OPEB liability for the fiscal year ending June 30, 2023, was 5.93%, which increased from the prior year rate of 5.70%.

- (b) Municipal Bond Rate: The single discount rate is based on the expected rate of return on OPEB plan investments of 6.50% and a municipal bond rate of 3.86% as reported in Fidelity Index's "20 Year Municipal GO AA Index" as of June 30, 2023. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the plan's fiduciary net position and future contributions were projected and were sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on insurance plan investments was applied to all periods of the projected benefit payments paid from the plan. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the plan's actuarially determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the plan's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.
- (c) Projected Cash Flows: The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employee contributions made each future year. Future contributions are projected assuming that the entire actuarially determined employer contribution is received by the plan each future year, calculated in accordance with the current funding policy.
- (d) Long-Term Rate of Return: The long-term (10-year) expected rates of return were determined by using a building-block method in which best estimated ranges of expected future real rates of return were developed for each asset class. The ranges were combined by weighting the expected future real rate of return by the target asset allocation percentage.

(e) Assumed Asset Allocations: The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	Target	Long Term Expected Real
Asset Class	Allocation	Rate of Return
Public equity	50.00%	5.90%
Private equity	10.00%	11.73%
Core fixed income	10.00%	2.45%
Specialty credit	10.00%	3.65%
Cash	0.00%	1.39%
Real estate	7.00%	4.99%
Real return	13.00%	5.15%
Total	100.00%	
		

The long-term expected rate of return on pension plan assets was established by the KPPA Board of Trustees at 6.50% based on a blending of the factors described above.

(f) Sensitivity Analysis: This paragraph requires disclosure of the sensitivity of the net OPEB liability (asset) to changes in the discount rate and changes in the healthcare cost trend rate.

The following table presents MSD's allocated portion of the net OPEB liability (asset) of the System, calculated using the discount rate of 5.93%, as well as what the MSD's allocated portion of the System's net OPEB liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (4.93%) or 1-percentage-point higher (6.93%) than the current rate for nonhazardous.

(dollars in thousands)	Current					
		Decrease 1.93%)	Discount Rate (5.93%)		1% Increase (6.93%)	
MSD's net OPEB liability	\$	4,844	\$	(2,581)	\$	(8,799)

The following table presents the MSD's allocated portion of the net OPEB liability (asset) of the System, calculated using the healthcare cost trend rate of percent, as well as what the MSD's allocated portion of the System's net OPEB liability (asset) would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate for nonhazardous.

(dollars in thousands)	Current Healthcare					
	1%	Decrease	Cost Trend Rate		1% Increase	
MSD's net OPEB liability	\$	(8,724)	\$	(2,581)	\$	4,411

Employer's Portion of the Collective OPEB Liability: MSD's proportionate share of the net OPEB liability (asset), as indicated in the prior table, is (\$2,581,356) or approximately 1.87%, or a decrease of 0.04% from fiscal year 2022. The net OPEB liability (asset) was distributed based on 2023 actual employer contributions to the plan.

Measurement Date: The total OPEB liability, net OPEB liability (asset), and sensitivity information shown

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT NOTES TO THE COMPARATIVE FINANCIAL STATEMENTS

in this report are based on an actuarial valuation date of June 30, 2022. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2023, using generally accepted actuarial principles.

<u>Changes in Assumptions and Benefit Terms:</u> Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

The discount rate used to calculate the total OPEB liability increased from 5.70% to 5.93%.

<u>Changes Since Measurement Date:</u> There were no material changes between the measurement date of the collective net OPEB liability (asset) and the employer's reporting date.

<u>OPEB Expense:</u> MSD was allocated OPEB expense of (\$4,658,736) related to the CERS for the year ending June 30, 2024.

<u>Deferred Outflows and Deferred Inflows</u>: Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce OPEB expense, they are labeled as deferred inflows. If they will increase OPEB expense, they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive System members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five-year period. Deferred inflows and outflows as of the measurement date include:

(dollars in thousands)	 ed Outflow esources	 rred Inflow Resources
Difference between expected and actual experience Change of assumptions Differences between expected and actual investment experience Changes in proportion and differences between contributions	\$ 1,800 5,080 - 1,864 8,744	\$ 36,653 3,540 599 1,496 42,288
Contributions subsequent to the measurement date	 843	 -
Total	\$ 9,587	\$ 42,288

There were no deferred outflows of resources resulting from employer contributions subsequent to the measurement date. The remainder of the deferred outflows and deferred inflows of resources are amortized over two to four years with remaining amortization as follows:

(dollars in thousands)	
Year Ending June 30:	
2024	\$ (7,942)
2025	(10,305)
2026	(8,350)
2027	(6,947)
	\$ (33,544)
	·

<u>OPEB Plan Fiduciary Net Position:</u> Detailed information about the OPEB plan's fiduciary net position is available in the separately issued OPEB plan financial reports.

					Sewer Distric					
	Schedule	of Proportio	nate Share	of the Net Pe	nsion Liabilit	ty				
		For the	Years Ende	ed June 30,						
		(d	ollars in thou	sands)						
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MSD's proportion of the net pension liability	1.60%	1.60%	1.51%	1.60%	1.72%	1.80%	1.82%	1.95%	1.83%	1.87%
MSD's proportionate share of the net pension liability	\$ 51,988	\$ 68,653	\$ 74,132	\$ 93,517	\$ 104,511	\$ 126,866	\$ 139,401	\$ 124,564	\$ 132,407	\$ 119,970
MSD's covered payroll	37,100	37,900	39,596	43,084	45,859	48,391	49,808	52,828	54,678	59,356
MSD's proportion of the net pension liability										
as a percentage of its covered payroll	140.1%	181.1%	187.2%	217.1%	227.9%	262.2%	279.9%	235.8%	242.2%	202.1%
Plan fiduciary net postion as a percentage										
of the total pension liability	66.80%	59.97%	55.50%	53.32%	53.54%	50.45%	47.81%	57.33%	52.42%	57.48%

Notes:

1) The amounts presented for each fiscal year were determined as of the prior year end.

Changes in Assumptions and Benefit Terms:

2015: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total pension liability have been updated as described in Schedule D of the CERS actuary report. The changes are noted below:

- The assumed investment rate of return was decreased from 7.75% to 7.50%.
- The assumed rate of inflation was reduced from 3.50% to 3.25%.
- The assumed rate of wage inflation was reduced from 1.00% to 0.75%.
- Payroll growth assumption was reduced from 4.50% to 4.00%.
- The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).
- For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- The assumed rates of retirement, withdrawal and disability were updated to more accurately reflect experience.

2016: There were no changes in assumptions and benefit terms since the prior measurement date.

2017: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total pension liability have been updated as follows:

- The assumed investment rate of return was decreased from 7.50% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- Payroll growth assumption was reduced from 4.00% to 3.05%.

2018: Since the prior measurement date, there have been no changes in actuarial assumptions. However, during the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children. The total pension liability as of June 30, 2018 was determined using these updated benefit provisions.

2019: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total pension liability have been updates as follows:

- Salary increases were increased from 3.05% to a range of 3.30% 10.30%.
- The Mortality Table was changed from RP-2000 to PUB-2010.

2020: Since the prior measurement date, there were no changes in assumptions, however benefit terms were updated as follows, which did not have a material impact on the total pension liability:

- The monthly payment to a surviving spouse of a member whose death was due to a duty-related injury upon remarriage of the spouse was reduced.
- Benefits were increased for a small number of beneficiaries.

2021: There were no changes in assumptions and benefit terms since the prior measurement date.

2022: There were no changes in assumptions and benefit terms since the prior measurement date.

2023: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total pension liability have been updated as follows:

The assumed investment rate of return was increased from 6.25% to 6.50%.

	Lo			le of Em	plo Ye	-	trib d J	utions - I une 30,	wer Distr Ision	ict						
	2	2015	2	2016		2017	:	2018	 2019		2020	 2021	 2022	:	2023	2024
Statutorily required contribution for pension Contribution in relation to the statutorily required contribution	\$	4,576 (4,576)	\$	4,767 (4,767)	\$	5,279 (5,279)	\$	6,196 (6,196)	\$ 7,534 (7,534)	\$	9,133 (9,133)	\$ 9,850 (9,850)	11,009 11,009)		13,055 (13,055)	\$ 13,947 (13,947
Annual contribution deficiency (excess)	\$		\$		\$		\$		\$ 	\$		\$ 	\$ 	\$		\$ -
MSD contributions as a percentage of statutorily required contribution for pension		100%		100%		100%		100%	100%		100%	100%	100%		100%	100%
MSD covered payroll Contributions as a percentage of MSD's covered payroll		37,900 12.07%		39,596 12.04%		43,084 12.25%		45,859 13.51%	\$ 48,391 15.57%		49,808 18.34%	\$ 52,828 18.65%	54,678 20.13%		59,356 21.99%	\$ 64,927 21.489

2019	2020	2021	2022	2023	2024
1 720/					
\$30,470 45,859	1.80% \$30,343 48,391	1.82% \$ 43,904 49,808	1.95% \$37,395 52,828	1.83% \$36,145 54,678	1.87% \$ (2,581) 59,356
66.44%	62.70%	88.15%	70.79%	66.11%	-4.35% 104.23%
	45,859 66.44%	45,859 48,391 6 66.44% 62.70%	45,859 48,391 49,808 66.44% 62.70% 88.15%	45,859 48,391 49,808 52,828 66.44% 62.70% 88.15% 70.79%	45,859 48,391 49,808 52,828 54,678 5 66.44% 62.70% 88.15% 70.79% 66.11%

Notes:

1) This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, governments should present information for those years that information is available.

Changes in Assumptions and Benefit Terms:

2017: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

- The assumed rate of return was decreased from 7.50% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- Payroll growth assumption was reduced from 4.0% to 3.05%.

2018: Since the prior measurement date, there have been no changes in actuarial assumptions. However, during the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The system shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty. The total OPEB liability as of June 30, 2018 was determined using these updated benefit provisions.

2019: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total pension liability have been updates as follows:

- Salary increases were increased from 3.05% to a range of 3.30% 10.30%.
- The Mortality Table was changed from RP-2000 to PUB-2010.

2020: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

- The discount rate used to calculate the total OPEB liability decreased from 5.68% to 5.34%.
- The assumed increase in future health care costs, or trend assumption, is reviewed on an annual basis and was updated (i.e. increased) to better reflect more current expectations relating to anticipated future increases in the medical costs.
- Actuarial information has been updated to reflect anticipated savings from the repeal of the "Cadillac Tax" and "Health Insurer Fee" which occurred in December 2019.

2021: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

The discount rate used to calculate the total OPEB liability decreased from 5.34% to 5.20%.

 The assumed increase in future health care costs, or trend assumption, is reviewed on an annual basis and was updated (i.e. increased) to better reflect more current expectations relating to anticipated future increases in the medical costs.

2022: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

The discount rate used to calculate the total OPEB liability increased from 5.20% to 5.70%.

2023: Since the prior measurement date, the demographic and economic assumptions that affect the measurement of the total OPEB liability have been updated as follows:

• The discount rate used to calculate the total OPEB liability increased from 5.70% to 5.93%.

	e of Employe or the Years	r Contribut	ions - OPEE e 30,				
	2018	2019	2020	2021	2022	2023	2024
Statutorily required contribution Contributions in relation to the statutorily required contribution	\$ 2,011	\$ 2,443	\$ 2,252 (2,252)	\$ 2,429 (2,429)	\$ 3,006 (3,006)	\$ 1,891 (1,891)	\$ -
Annual contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MSD contributions as a percentage of statutorily required contribution for OPEB	100%	100%	100%	100%	100%	100%	100%
MSD covered payroll Contributions as a percentage of MSD's covered payroll	\$45,859 4.39%	\$48,391 5.05%	\$49,808 4.52%	\$52,828 4.60%	\$54,678 5.50%	\$59,356 3.19%	\$64,927 0.00%

Notes:

1) This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, governments should present information for those years that information is available.



STATISTICAL SECTION (Unaudited)



MSD's Hite Creek Water Quality Treatment Center

LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT STATISTICAL SECTION TABLE OF CONTENTS

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Louisville and Jefferson County Metroplitan Sewer District Schedule 1 - Comparative Revenue and Expense Highlights Fiscal Years Ended June 30, 2024 and 2023 Dollars in Thousands



Louisville and Jefferson County Metropolitan Sewer District Schedule 2 - Comparative Schedule of Net Position Years Ended June 30 Dollars in Thousands

	2015	2016	2017	2018	2019	l Year 2020	2021	2022	2023	2024
	2010	2010	2011	2010	2010	2020	2021	2022	2020	2024
Current assets:										
Unrestricted cash and cash equivalents Unrestricted investments	\$ 63,013 100	\$ 69,481 100	\$ 42,449 10,095	\$ 50,276 25,080	\$ 43,728 36,744	\$ 99,973 100	\$ 79,281 28,124	\$ 48,875 69,754	\$ 66,305 69,417	\$ 55,863 60,002
Restricted cash and cash equivalents	16,342	5,379	19,454	29,987	22,348	17,776	21,181	20,788	22,414	23,366
Restricted investments	-	14,999	22,675	-	30,172	-	-	12,947	-	11,052
Accounts receivable	23,787	26,696	23,480	26,332	27,915	27,227	24,664	26,242	28,963	44,148
Inventories Prepaid expenses and other current assets	3,981 2,880	4,210 3,184	4,184 2,877	4,407 3,845	4,623 3,918	4,977 4,147	5,086 6,386	5,262 3,290	5,811 826	6,264 1,167
Total current assets	110,103	124,049	125,214	139,927	169,448	154,200	164,722	187,158	193,736	201,862
Noncurrent assets:										
Unrestricted noncurrent assets	18,615	29,235	37,642	1,399	13,730	12,776	10,478	7,138	5,271	52,992
Restricted noncurrent assets	120,165	120,212	86,550	151,039	76,678	79,555	82,930	80,331	77,898	65,010
Captial assets										
Utility plant in service	2,455,476	2,812,333	2,943,414	3,047,458	3,580,741	3,697,720	3,849,047	4,291,770	4,625,654	4,795,037
Less: accumulated depreciation Net utility plant in service	(925,901) 1,529,575	(979,405) 1,832,928	(1,046,707) 1,896,707	(1,109,966) 1,937,492	(1,208,329) 2,372,412	(1,221,668) 2,476,052	(1,305,547) 2,543,500) (1,418,965) 2,872,805	(1,507,858) 3,117,796	(1,621,545) 3,173,492
Construction in progress	623,181	487,674	581,222	711,655	460,501	538,013	625,113	420,200	309,372	438,652
Prepaid regulatory assets, net of amortization	239,710	252,659	264,108	276,834	285,745	288,692	290,293	287,023	283,043	284,728
Subscription assets, net of amortization		-	-	-	-	-	-	-	6,093	6,882
Net capital assets	2,392,466	2,573,261	2,742,037	2,925,981	3,118,658	3,302,757	3,458,906	3,580,028	3,716,304	3,903,754
Other noncurrent assets	30,807	29,316	32,768	32,222	17,915	17,023	15,883	15,347	14,956	17,787
Total noncurrent assets	2,562,053	2,752,024	2,898,997	3,110,641	3,226,981	3,412,111	3,568,197	3,682,844	3,814,429	4,039,543
Total assets	2,672,156	2,876,073	3,024,211	3,250,568	3,396,429	3,566,311	3,732,919	3,870,002	4,008,165	4,241,405
Deferred outflow of resources	20,407	23,708	35,911	54,267	52,018	79,767	80,984	72,110	59,456	42,363
Total assets and deferred outflows	\$ 2,692,563	\$ 2,899,781	\$ 3,060,122	\$ 3,304,835	\$ 3,448,447	\$ 3,646,078	\$ 3,813,903	\$ 3,942,112	\$ 4,067,621	\$ 4,283,768
Accounts payable and accrued expenses Early retirement incentive plan payable Total current liabilities	\$ 14,936 14,936	\$ 17,420 17,420	\$ 16,550 16,550	\$ 16,342 16,342	\$ 18,168 18,168	\$ 24,176 24,176	\$ 29,099	\$ 20,395 20,395	\$ 17,940 17,940	\$ 36,314 36,314
Current liabilities:										
Accounts payable and accrued expenses	30,607	33,271	30,764	47,472	31,945	39,860	46,237	30,464	38,706	48,188
Accrued interest	13,036	17,533	15,935	18,455	17,819	17,315	20,093	16,622	17,895	13,316
Refundable deposits Revenue bonds payable	1,639 29,415	2,557 31,825	2,300 33,655	2,861 40,190	2,928 42,200	2,954 43,460	2,757 47,565	1,920 52,880	2,142 52,375	1,689 53,985
Bond anticipation note	-	-	-	-	-	-	-	-	14,145	-
Bank notes	-	-	-	-	100	100	-	-	-	-
Other subordinate debt	-	-	-	105	545	2,167	1,817	2,038	3,095 1,616	10,800
Subscription asset liability Total current liabilities	74,697	85,186	82,654	109,083	95,537	105,856	118,469	103,924	129,974	2,353 130,331
Name and Habilities										
Noncurrent liabilities: Revenue bonds payable, net	1,583,390	1.722.745	1,831,605	1,956,540	1,914,340	1,868,455	2,057,555	2,228,405	2,151,935	2,395,482
Unamortized debt premium/discount	60,797	67,462	74,328	90,628	80,421	74,458	74,817	88,050	98,019	110,885
Bond anticipation note, net	226,340	226,340	226,340	226,340	226,340	226,340	226,340	226,340	212,195	-
Commercial paper notes Other subordinated debt, net	- 2.169	- 2,072	1 072	- 1,766	120,000 2,113	255,000 28,284	150,000 44,304	50,000 50,604	165,000 48,296	204,870 50,079
Investment derivative asset liability	2,168	2,072	1,973	59,443	73,040	72,228	63,431	40,914	27,247	21,204
At-market derivative asset liability	-	-	-	-	-	20,822	8,541	-	,	
Net Pension liability and Net OPEB liability	51,988	68,653	74,132	125,636	134,981	157,209	183,305	161,959	168,552	119,970
Other long-term liabilities Subscription asset liability, net	944	690	-	-	-		- :		3,336	3,675
Total long-term debt	1,925,627	2,087,962	2,208,378	2,460,353	2,551,235	2,702,796	2,808,293	2,846,272	2,874,580	2,906,165
Total liabilities	2,015,260	2,190,568	2,307,582	2,585,778	2,664,940	2,832,828	2,955,861	2,970,591	3,022,494	3,072,810
Deferred inflow of resources	92,233	108,633	84,052	10,383	12,955	16,520	10,277	48,489	40,848	77,862
Net position:										
Net investment in capital assets	506,187	501,675	562,784	528,377	672,304	684,412	762,848	850,316	955,494	1,040,323
Restricted	80,424	84,639	150,386	156,425	81,207	80,421	84,429	84,607	82,418	86,112
Unrestricted Total net position	(1,541)	14,266	(44,682)	23,872	17,041	31,897	488	(11,891)	(33,633)	6,661
•	585,070	600,580	668,488	708,674	770,552	796,730	847,765	923,032	1,004,279	1,133,096
•	585,070	600,580			770,552	796,730			1,004,279 \$ 4,067,621	1,133,096 \$ 4,283,768

Louisville and Jefferson County Metropolitan Sewer District Schedule 3 - Comparative Statements of Revenues, Expenses, and Changes in Net Position Years Ended June 30 Dollars in Thousands

						Fiscal Y	ear				
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating revenue: Wastewater service charges Drainage service charges Other operating income	\$	173,895 \$ 51,567 4,407	183,592 \$ 54,888 4,810	194,965 \$ 58,978 5,691	210,636 \$ 63,868 4,645	219,467 \$ 69,706 5,195	237,807 \$ 75,052 6,198	245,802 \$ 79,915 3,701	270,066 \$ 86,804 8,497	290,697 \$ 94,466 6,863	313,827 100,365 12,083
Total operating revenue		229,869	243,290	259,634	279,149	294,368	319,057	329,418	365,367	392,026	426,275
Operating expenses: Service and administrative costs Capitalization/recovery of cost Capitalized overhead (over) under applied Depreciation and amortization Total operating expenses		106,174 (30,056) - 63,321 139,439	121,674 (30,516) - 62,820 153,978	122,098 (31,949) - 77,156 167,305	142,711 (38,147) 88 77,954 182,606	154,325 (38,383) - 87,882 203,824	167,771 (39,643) - 98,872 227,000	170,073 (41,785) - 97,874 226,162	169,869 (42,166) - 103,964 231,667	167,924 (41,151) - 114,562 241,335	168,729 (40,786) - 131,336 259,279
Income (loss) from operations	_	90,430	89,312	92,329	96,543	90,544	92,057	103,256	133,700	150,691	166,996
Non-operating revenue (expense): Gain/loss disposal of assets Investment income Build America bond refund Interest expense - bonds Interest expense - swaps Interest expense - other Amortization of debt discount/premium Amortization of loss on refunding Capitalized interest Change in fair values - swaps Total non-operating revenue (expenses), net Net income / (loss) before contributions		7,527 10,096 (83,404) (9,737) (4,611) 7,887 (1,980) 20,511 (5,240) (58,951) 31,479	7,559 10,332 (86,818) (9,514) (8,601) 12,052 (1,949) 21,051 (22,951) (78,839)	4,047 10,226 (90,117) (8,926) (9,317) 13,701 (3,070) 20,074 26,072 (37,310) 55,019	6,280 10,249 (95,041) (7,724) (9,873) 15,198 (3,147) 21,859 16,317 (45,882)	15 8,338 10,339 (94,831) (6,468) (13,497) 14,344 (2,817) 18,582 (13,597) (79,592)	(15,008) 5,275 10,325 (92,274) (8,027) (13,129) 12,688 (2,404) 13,043 812 (88,699)	(21) 1,777 10,398 (93,067) (9,793) (13,104) 17,429 (3,107) 12,049 8,796 (68,643) 34,613	124 (1,467) 10,344 (86,792) (9,502) (12,873) 17,172 (3,768) 7,464 11,293 (68,005)	(14,320) 7,253 11,350 (91,736) (3,988) (15,337) 13,189 (3,631) 6,961 7,614 (82,645)	(111) 13,618 9,444 (98,705) (1,706) (14,650) 7,312 (1,442) 12,749 5,009 (68,482)
Contributions Property owner assessments All other		- 4,605	- 5,037	2,376 10,513	12,726	- 50,926	9,085	- 16,422	- 9,572	- 13,201	30,303
Increase (decrease) in net position		36,084	15,510	67,908	63,387	61,878	12,443	51,035	75,267	81,247	128,817
Net position, beginning of year Net position, OCEA merger Restatement for GASB 68 implementation Restatement for GASB 75 implementation Net Position, beginning of year, as restated		548,986 - - - 548,986	585,070 - - - 585,070	600,580 - - - - 600,580	668,488 - - (23,201) 645,287	708,674 - - - 708,674	770,552 13,735 - - 784,287	796,730 - - - 796,730	847,765 - - - 847,765	923,032 - - - 923,032	1,004,279 - - - - 1,004,279
Net position, end of year	\$	585,070 \$	600,580 \$	668,488 \$	708,674 \$	770,552 \$	796,730 \$	847,765 \$	923,032 \$	1,004,279 \$	1,133,096

Louisville and Jefferson County Metropolitan Sewer District Schedule 4 - Comparative Statements of Cash Flows Years Ended June 30 Dollars in Thousands

					Fiscal Ye	ear				
_	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cash flows from operating activities:										
	\$ 227,976	\$ 240,202 \$	262,055 \$	276,711 \$	292,791 \$	319,701 \$	331,767 \$	362,992 \$	392,004 \$	424,067
Cash paid to suppliers and employees	(75,258)	(85,202)	(88,300)	(95,150)	(103,173)	(105,649)	(107,122)	(166,818)	(166,086)	(160,877)
Net cash provided by operating activities	152,718	155,000	173,755	181,561	189,618	214,052	224,645	196,174	225,918	263,190
Cash flows from capital and related financing activities:										
Proceeds from issuance of revenue bonds	80,000	175,000	150,000	175,000	-	-	233,133	248,821	-	127,575
Proceeds from issuance of bond anticipation note	226,340	226,340	226,340	226,340	230,334	230,079	237,295	232,924	229,468	-
Proceeds from issuance of commercial paper	-		-	-	319,112	770,000	365,000	375,000	595,000	2,498,755
Proceeds from issuance of notes	-		-	-	100	90,200	-	-	-	-
Proceeds from issuance of other subordinate debt	-		-	-	-		17,788	7,824	1,282	5,316
Premium from sale of bonds	-	16,887	15,715	21,894	-		-	-	-	-
Payments for retirement of revenue bonds	-		-	-	(40,190)	(43,120)	(48,033)	(55,497)	(57,455)	(52,877)
Payments for retirement of bond anticipation note	-	-	-	-	(226,340)	(226,340)	(226,340)	(226,340)	(226,340)	(226,340)
Payments for retirement of commercial paper	-		-	-	(200,000)	(635,000)	(470,000)	(475,000)	(480,000)	(2,251,560)
Payments for retirement of notes	-		-	-	-	(90,200)	(100)	- 1		- 1
Payments for retirement of other subordinate debt	-		-	-	(317)	(2,120)	(2,119)	(1,926)	(2,533)	(3,153)
Principal paid on debt	(271,853)	(255,291)	(271,064)	(263,395)	-		-	- 1		- 1
Payments for interest expense	-	(92,246)	(103,919)	(102,394)	(108,511)	(106,312)	(103,393)	(103, 136)	(105,800)	(117,933)
Payments for interest on swaps	(9,737)	(9,514)	(8,926)	(7,724)	(6,468)	(7,622)	(9,793)	(9,502)	(3,988)	(1,706)
Build America bond refund	10,096	10,332	10,226	10,248	10,339	10,325	10,398	10,344	10,360	10,360
Proceeds from capital grants		91	6,386	7,183	9,373	1,786	1,914	2,610	(88)	3,912
Proceeds from sale of capital assets	-	614	10	3	15	-	-	124	- '	21
Payments for capital assets		(213,996)	(220,892)	(216,503)	(233,360)	(224,418)	(219,909)	(182,495)	(190,945)	(241,621)
Proceeds from assessments		2,329	1.254	1,621	780	1,169	2.465	3,378	1,956	704
Assessments extended		-	(2,376)	-	-	-	-	-	-	
Capital contributed by others	4,605	-	-	-	-	-	-	-	-	-
Assessments receivable	2.050				-		-		-	-
Interest income - assessments	340				-		-		-	-
Interest paid on revenue bonds	(87,813)				-		-		-	-
Acquisition and construction of capital assets	(147,842)				-		-		-	-
Acquisition of non-operating property	(247)				-		-		-	-
Net cash provided (used) by capital and related										
financing activities	(194,061)	(139,454)	(197,246)	(147,727)	(245,133)	(231,573)	(211,694)	(172,871)	(229,083)	(248,547)
Cash flows from investing activities:										
Change in investments	1.052	(15,047)	15.990	(56,798)	34.428	86.661	(55,205)	(55,638)	17.574	(36,905)
Investment income	13,974	5,626	2,951	5,081	6,238	6,864	1,423	2,203	5,523	10,334
Net cash provided (used) by investing activities	15,026	(9,421)	18,941	(51,717)	40,666	93,525	(53,782)	(53,435)	23,097	(26,571)
Net increase (decrease) in cash and cash										
equivalents	(26,317)	6,125	(4,550)	(17,883)	(14,849)	76,004	(40,831)	(30,132)	19,932	(11,928)
Cash and cash equivalents, beginning of year	124,287	97,970	104,095	99,545	81,662	66,813	142,817	101,986	71,854	91,786
Cash and cash equivalents, end of year	\$ 97,970	\$ 104,095 \$	99,545 \$	81,662 \$	66,813 \$	142,817 \$	101,986 \$	71,854 \$	91,786 \$	79,858

Presentation and classification of items in the Statements of Cash Flows from capital and related financing activities section was changed to provide better clarity beginning with the 2017 ACFR. Prior years were not reclassified and are shown as originally presented.

Louisville and Jefferson County Metropolitan Sewer District Schedule 5 - Comparative Schedule of Days Cash on Hand Years Ended June 30 Dollars in Thousands

					Fisca	l Ye	ar					
	 2015	2016	2017	2018	2019		2020	2021	2	022	2023	2024
Unrestricted Cash and investments	\$ 63,113	\$ 69,581	\$ 52,544	\$ 75,356	\$ 80,473	\$	100,073	\$ 107,405	\$	118,629	\$ 135,722	\$ 164,234
Gross Operating & Maintenance Expenses ¹ Days Cash on Hand	\$ 106,301 217	\$ 117,671 216	\$ 119,586 160	\$ 131,948 208	\$ 142,082 207	\$	149,945 244	\$ 151,527 \$ 259	\$	161,144 269	\$ 165,792 299	\$ 178,716 335

¹Excludes the actuarial portion of changes to GASB 68 pension expense and GASB 75 OPEB for the year.



Louisville and Jefferson County Metropolitan Sewer District Schedule 6 - Comparative Schedule of Number of Customer Connections Years Ended June 30

					Fisca	Year				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Wastewater										
Jefferson										
Residential	215,047	216,177	217,363	218,656	220,134	221,796	223,807	224,166	224,522	225,618
Commercial	20,736	20,918	21,184	21,229	21,214	21,331	21,391	21,512	21,526	22,031
Industrial	352	370	373	374	380	385	389	392	392	402
Total Jefferson	236,135	237,465	238,920	240,259	241,728	243,512	245,587	246,070	246,440	248,051
Oldham										
Residential	-	-	-	-	-	-	6,342	6,395	6,921	6,934
Commercial	_	_	-	_	-	-	156	224	225	247
Industrial	-	-	-	-	-	-	1	1	1	1
Total Oldham	-	-	-	-	-	-	6,499	6,620	7,147	7,182
Bullitt										
Residential	-	-	-	-	-	-	-	3,801	4,577	4,595
Commercial	-	-	-	-	-	-	-	115	165	165
Industrial	-	-	-	-	-	-	-	1	1	1
Total Bullitt	-	-	-	-	-	-	-	3,917	4,743	4,761
Total Wastewater	236,135	237,465	238,920	240,259	241,728	243,512	252,086	256,607	258,330	259,994
Drainage Jefferson										
Residential	201,485	202,288	203,113	205,185	206,499	207,317	208,060	209,335	210,242	211,432
Commercial	13,964	13,950	14,006	14,011	14,024	14,087	14,062	14,040	13,950	13,853
Industrial	226	235	242	247	257	271	269	274	279	283

300,000 250,000 200,000 150,000 100,000

2015

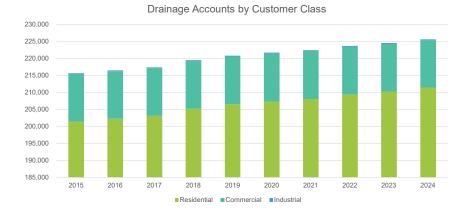
2016

2017



2018 2019 2020 2021 2022 2023 2024

Residential Commercial Industrial



Louisville and Jefferson County Metropolitan Sewer District Schedule 7 - Comparative Schedule of Average Residential Rates Years Ended June 30

									Fis	cal	Year					
		2015		2016		2017		2018	2019		2	2020	2021	2022	2023	2024
Jefferson County																
Wastewater service charges:																
Service charge	\$	12.22	\$	12.89	\$	13.78	\$	14.73 \$	15.	75	\$	16.83	\$ 17.68	\$ 18.90	\$ 19.85 \$	21.22
Volume charge ¹		13.36		14.08		15.04		16.08	17.	20		18.40	19.32	20.64	21.67	23.17
Consent decree surcharge		9.98		10.53		11.26		12.04	12.	37		13.76	14.45	15.45	16.22	17.34
Total wastewater service charges		35.56		37.50		40.08		42.85	45.	32		48.99	51.45	54.99	57.74	61.73
Drainage service charges:																
Service charge		7.68		8.10		8.66		9.26	9.			10.58	11.11	11.88	12.47	13.33
Total drainage service charges		7.68		8.10		8.66		9.26	9.	90		10.58	11.11	11.88	12.47	13.33
Total MSD bill	\$	43.24		45.60		48.74	\$	52.11 \$		72	\$	59.57	\$ 62.56		\$ 70.21 \$	75.06
Bill as a % of MHI		1.01%	5	1.05%		1.06%		1.12%	1.1	3%		1.15%	1.24%	1.24%	1.28%	1.34%
Oldham County (former OCEA) ²																
Wastewater service charges:																
Service charge	\$	-	\$	-	\$	-	\$	- \$	-	:	\$	47.92	\$ 47.92	\$ 47.92	\$ 47.92 \$	50.32
Volume charge ¹		-		_		-		-	-			31.20	31.20	31.20	23.20	24.36
Total MSD bill	\$	-	\$	-	\$	-	\$	- \$	-		\$	79.12	\$ 79.12	\$ 79.12	\$ 71.12 \$	74.68
Bill as a % of MHI												0.90%	0.87%	0.82%	0.72%	0.74%
Bullitt County (former BCSD) ³																
Wastewater service charges:																
Service charge	\$	-	\$	-	\$	-	\$	- \$	-		\$	-	\$ - :	\$ 35.58	\$ 39.85 \$	44.63
Volume charge ¹		-		-		-		-	-			-	-	20.70	23.18	25.97
Total MSD bill	\$	-	\$	-	\$	-	\$	- \$	-		\$	-	\$ - :	\$ 56.28	\$ 63.03 \$	70.60
Bill as a % of MHI														0.87%	0.96%	1.06%
Bullitt County (former HH and BV)3															
Wastewater service charges:																
Service charge	\$	-	\$	-	\$	-	\$	- \$	-	:	\$	-	\$ - :	\$ 26.83	\$ 31.66 \$	37.36
Volume charge ¹		-		-		-		-	-			-	-	8.00	11.60	16.82
Total MSD bill	\$	-	\$	-	\$	-	\$	- \$	-		\$	-	\$ - :	\$ 34.83	\$ 43.26 \$	54.18
Bill as a % of MHI														0.54%	0.66%	0.81%
¹ Average residential volume charge is ba	sed o	n 4,000 gallor	ns/mc	nth of water u	use.											
² MSD acquired the Oldham County Envir	onme	ntal Authority	(OCE	EA) on June 3	30, 20	020.										
³ MSD acquired the Bullitt County Sanitati	ion Dis	strict (BCSD)	includ	ling Hunters I	Hollo	w (HH) and Bio	g Va	alley (BV) on Nov	ember 30, 2	2021.						
Jefferson County MHI		51.230		52.008		54.977		55.860	59,0	25		62.067	60.636	64.719	65.903	67.109
Oldham County MHI		84.415		92,454		97.960		102.136	101.1			105.897	109,181	116.173	118.299	120,464
Bullitt County MHI		54,755		63,570		62,550		61,022	66,3			71,835	68,630	77,192	78,605	80,043
•						,		,-				,		, .		.,.

Median Household Income (MHI) Source: https://fred.stlouisfed.org/series/MHIKY21185A052NCEN. 2022 is the last year with published MHI data. Subsequent years are projected growing MHI at 1.0183% annually.

Schedule 8 - Comparative Schedule of Monthly Residential Rates, Rentals and Charges Years Ended June 30

										Fisca	ΙΥ	ear								
		2015		2016		2017		2018		2019		2020	202	21		2022		2023		2024
Jefferson County Wastewater:																				
Service charge by meter size:																				
5/8-3/4	\$	12.22	\$	12.89	\$	13.78	\$	14.73	\$	15.75	\$	16.84	\$	17.68	\$	18.90	\$	19.85	\$	21.22
1	\$	24.54		25.89		27.68			\$	31.63	\$	33.81		35.50		37.95		39.85		42.60
1 1/2	\$	44.08		43.08		46.05		49.23		52.62		56.25		59.06		63.14		66.30		70.87
2	\$	55.99		59.07		63.15			\$	72.17		77.15		81.01		86.60		90.93		97.20
3	\$	124.83		131.70		140.78		150.49		160.88		171.98		180.58		193.04		202.69		216.68
4	\$	201.83	\$	212.93	\$	227.62	\$	243.33	\$	260.12	\$	278.07	\$	291.97	\$	312.12	\$	327.73	\$	350.34
Volume charge per 1,000 gallons	\$	3.34	\$	3.52	\$	3.76	\$	4.02	\$	4.30	\$	4.60	\$	4.83	\$	5.16	\$	5.42	\$	5.79
Consent decree surcharge	\$	9.98	\$	10.53	\$	11.26	\$	12.04	\$	12.87	\$	13.76	\$	14.45	\$	15.45	\$	16.22	\$	17.34
Jefferson County Drainage:																				
Service charge	\$	7.68	\$	8.10	\$	8.66	\$	9.26	\$	9.90	\$	10.58	\$	11.11	\$	11.88	\$	12.47	\$	13.33
Oldham County Wastewater: 1																				
Service charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	47.92	\$	47.92	\$	47.92	\$	47.92	\$	50.32
Values above	•		•		•		\$	_	•		•	7.80	•	7.80	•	7.80	•	F 00	•	6.10
Volume charge	\$	-	\$	-	\$	-	Ф	-	\$	-	\$	7.00	Ф	7.60	ф	7.00	ф	5.80	Ф	0.10
Bullitt County (former BCSD)																				
Wastewater: ²																				
Service charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	35.58	\$	39.85	\$	44.63
Volume charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	10.35	\$	11.59	\$	12.98
Bullitt County (former HH and BV)																				
Wastewater: ²																				
	\$		•		4		\$		•		¢		\$		•	26.83	•	31.66	•	37.36
Service charge	\$	-	\$	-	\$	-	ф	-	\$	-	\$	-	Ф	-	\$	26.83	Ф	31.66	Þ	37.30
Volume charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	8.00	\$	11.60	\$	16.82

¹MSD acquired the Oldham County Environmental Authority (OCEA) on June 30, 2020. ²MSD acquired the Bullitt County Sanitation District (BCSD) including Hunters Hollow (HH) and Big Valley (BV) on November 30, 2021.

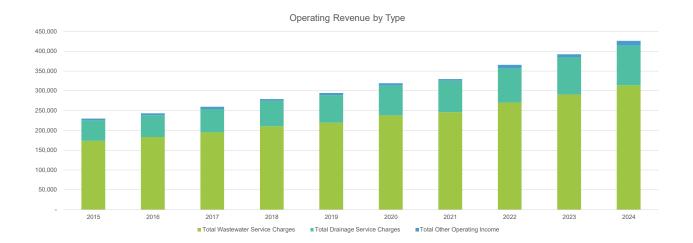
Schedule 9 - Comparative Schedule of Monthly Commercial and Industrial Rates, Rentals and Charges Years Ended June 30

										Fisca	l Ye	ear								
		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024
Jefferson County Wastewater:																				
Service charge by meter size:	•	40.70	•	40.70	•	04.40	•	00.00	•	04.40	•	10.01	•	47.00	•	40.00	•	40.05		04.00
5/8-3/4	\$			19.79		21.16		22.62		24.18		16.84		17.68		18.90		19.85 \$		21.22
1	\$	32.71	\$		\$		\$	39.44	\$			33.81		35.50		37.95		39.85 \$		42.60 70.87
1 1/2	\$	49.08	\$		\$	55.35		59.18	\$				\$	59.06		63.14		66.30 \$		
2 3	\$	63.02			\$		\$	75.98	\$	81.22	\$		\$	81.01		86.60		90.93 \$		97.20
3 4	\$	133.30 210.04		140.63 221.59	\$		\$	160.70 253.22	\$	171.79 270.69	\$		\$	180.58 291.97		193.04 312.12		202.69 \$ 327.73 \$		216.68 350.34
6	\$	403.58		425.78			\$	486.57		520.14		546.39		573.71		613.30		643.97		688.40
8	\$	606.58			\$		\$	731.30	\$	781.76			\$	860.58		919.96		965.96		1,032.61
10	\$	793.18		836.80		894.54		956.26		1,022.24		1,076.77		1,130.61		1,208.62		1,269.05		1,356.61
12	\$	1.151.56	\$		\$		\$	1,388.34	\$	1,484.14			\$	1,665.88		1,780.83		1,869.87		1,998.89
16	\$		\$	1,472.62		1,574.23		1,682.85		1,798.97		1,923.05		2,019.20		2,158.52		2,266.45		2,422.84
10	Ψ	1,000.00	Ψ	1,472.02	Ψ	1,574.25	Ψ	1,002.00	Ψ	1,730.37	Ψ	1,923.03	Ψ	2,013.20	Ψ	2,100.02	Ψ	2,200.45	,	2,422.04
Commercial regular volume charge per																				
1,000 gallons	\$	3.86	\$	4.07	\$	4.35	\$	4.65	\$	4.97	\$	5.31	\$	5.58	\$	5.97	\$	6.27 \$		6.70
1,000 gallons	Ψ	0.00	Ψ	4.07	Ψ	4.00	Ψ	4.00	Ÿ	4.57	Ψ	0.01	Ψ	0.00	Ψ	0.57	Ψ	0.21 4	,	0.70
Industrial regular volume charge per 1,000																				
gallons	\$	4.02	\$	4.24	\$	4.53	\$	4.84	\$	5.17	\$	5.53	\$	5.81	\$	6.21	\$	6.52 \$		6.97
gallons	Ψ	7.02	Ψ	7.27	Ψ	4.00	Ψ	4.04	Ÿ	0.17	Ψ	0.00	Ψ	0.01	Ψ	0.21	Ψ	0.02 4	,	0.51
Consent decree surcharge (greater of)																				
Commercial regular volume base	\$	9.98	\$	10.53	\$	11.26	\$	12.04	\$	12.87	\$	13.76	\$	14.45	\$	15.45	\$	16.22 \$		17.34
Commercial usage per 1,000 gallons	\$	1.19		1.26		1.35		1.44		1.54		1.65		1.78		1.85		1.94 \$		2.07
Commercial usage per 1,000 gallons	Ψ	1.10	Ψ	1.20	Ψ	1.00	Ψ	1.44	Ÿ	1.04	Ψ	1.00	Ψ	1.70	Ψ	1.00	Ψ	1.54 4	,	2.07
Industrial regular volume base	\$	9.98	\$	10.53	\$	11.26	\$	12.04	s	12.87	\$	13.76	\$	14.45	\$	15.45	\$	16.22 \$		17.34
Industrial usage per 1,000 gallons	\$	1.24		1.31		1.40		1.50		1.60		1.71		1.80		1.92		2.02 \$		2.16
madema adago por 1,000 ganono	Ψ.		Ψ.		Ψ.	1.10	Ψ.	1.00	~	1.00	Ψ.		Ψ.	1.00	Ψ.	1.02	Ψ.	2.02		2.10
Jefferson County Drainage:																				
Service charge per ESU	\$	7.68	\$	8.10	\$	8.66	\$	9.26	\$	9.90	\$	10.58	\$	11.11	\$	11.88	\$	12.47 \$		13.33
Service charge per ESO	Ψ	7.00	Ψ	0.10	Ψ	0.00	Ψ	3.20	Ψ	3.30	Ψ	10.50	Ψ	11.11	Ψ	11.00	Ψ	12.47 4	,	10.00
Oldham County Wastewater:1																				
The second secon																				
Service charge by meter size: 5/8-3/4	•		•		•		•		•		Φ.	90.19	•	00.40	•	00.40	Φ.	00.40		94.70
5/8-3/4 1	\$	-	\$	-	\$	-	\$	-	\$	-	\$			90.19		90.19		90.19 \$		
1 1/2	\$	-	\$	-	\$	-	\$	-	\$	-	\$		\$	117.90 193.66		117.90 193.66		117.90 \$ 193.66 \$		123.80 203.34
2	\$		\$		э \$	-	\$		\$	-	\$									250.59
			\$			-							\$	238.66		238.66		238.66 \$		
3 4	\$	-	\$	-	\$	-	\$ \$	-	\$ \$	-	\$	307.48 370.57	\$	307.48 370.57		307.48 370.57		307.48 \$ 370.57 \$		322.85 389.10
4	Ф	-	Ф	-	Ф	-	Ф	-	Э	-	Ф	370.57	Ф	3/0.5/	Ф	3/0.5/	Ф	3/0.5/ \$	•	369.10
Values shares	\$		\$		\$		\$		\$	_	\$	7.80	•	7.80	•	7.80	Φ.	5.80 \$		6.10
Volume charge	Ф	-	Ф	-	Ф	-	Ф	-	Э	-	Ф	7.60	Ф	7.60	Ф	7.00	Ф	5.60 \$	•	6.10
Bullitt County (former BCSD)																				
Wastewater: ²																				
Service charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	26.83	\$	31.66 \$	\$	37.36
Volume charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	8.00	\$	11.60 \$	5	16.82

¹MSD acquired the Oldham County Environmental Authority (OCEA) on June 30, 2020. ²MSD acquired the Bullitt County Sanitation District (BCSD) on November 30, 2021.

Louisville and Jefferson County Metropolitan Sewer District Schedule 10 - Comparative Summaries of Opearting Revenue Years Ended June 30 Dollars in Thousands

					Fiscal Y	ear				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Service charges:										
Wastewater service charges:										
Residential	\$ 96,563 \$		108,809 \$	116,458 \$	122,830 \$	140,125 \$		156,764 \$	167,136 \$	177,021
Commercial	62,257	58,343	61,860	66,651	71,054	74,134	74,459	86,009	94,538	100,777
Industrial	17,605	19,878	21,218	24,439	23,171	21,758	23,080	23,558	24,938	32,590
Other - net	2,806	8,186	6,853	7,517	6,803	5,997	2,588	7,840	9,156	8,284
Metro Government	 (5,336)	(4,220)	(3,775)	(4,429)	(4,391)	(4,207)	(2,416)	(4,105)	(5,071)	(4,845)
Total wastewater service charges	173,895	183,592	194,965	210,636	219,467	237,807	245,802	270,066	290,697	313,827
Drainage service charges:										
Residential	20,090	20,439	22,111	23,811	25,716	27,684	29,413	31,497	34,340	37,203
Commercial	28,936	32,971	35,372	35,778	38,775	41,960	45,220	48,525	52,462	54,441
Industrial	3,030	3,219	3,445	3,864	4,373	4,815	5,239	5,671	6,277	6,870
Other - net	-	-	-	2,533	2,834	2,999	2,576	3,802	4,274	4,904
Metro Government	(489)	(1,741)	(1,950)	(2,118)	(1,992)	(2,406)	(2,533)	(2,691)	(2,887)	(3,053)
Total stormwater service charges	 51,567	54,888	58,978	63,868	69,706	75,052	79,915	86,804	94,466	100,365
Total service charges	 225,462	238,480	253,943	274,504	289,173	312,859	325,717	356,870	385,163	414,192
Other operating income:										
Capacity charges	2,667	2,087	3,318	3,132	3,552	4,151	2,309	5,072	3,204	6,856
Connection fees	379	1,118	(723)	76	14	363	135	151	-	5
Inflow & infiltration fees	-	-	-	-	1,162	1,155	628	1,610	1,092	1,756
Regional facilities fees	34	16	-	-	-	-	-	-	-	630
Wastewater miscellaneous	1,327	1,589	3,096	1,437	467	529	629	1,664	2,567	2,836
Drainage miscellaneous	-	-	-	-	-	-	-	-	-	
Total other operating income	4,407	4,810	5,691	4,645	5,195	6,198	3,701	8,497	6,863	12,083
Total operating revenue	\$ 229.869 \$	243.290 \$	259.634 \$	279.149 \$	294.368 \$	319.057 \$	329.418 \$	365.367 \$	392.026 \$	426.275

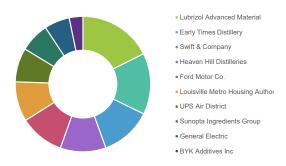


Louisville and Jefferson County Metropolitan Sewer District Schedule 11 - Ten Largest Wastewater Customers - Jefferson County Current Year and Nine Years Ago

Rank	Customer Name	FY	24 Wastewater Billed	Percent Total Wastewater Revenue
1	Early Times Distillery	\$	6.435.981	2.13%
2	Heaven Hill Distilleries	-	5.636.792	1.87%
3	Lubrizol Advanced Material		2,468,843	0.82%
4	The Chemours Company		2,033,380	0.67%
5	Swift Pork Company		1,790,382	0.59%
6	Ford Motor Co.		1,383,171	0.46%
7	Rohm & Haas		1,213,630	0.40%
8	Clariant Corporation		1,185,797	0.39%
9	Haier US Appliance Solutions Inc		1,184,904	0.39%
10	Ford Motor Co.		843,681	0.28%
	Total		24,176,560	8.01%
	Total FY 24 Jefferson Wastewater Revenue:	\$	301,829,059	

FY24 Ten Largest Drainage Custome	ers - Jefferson County
	Early Times Distillery Heaven Hill Distilleries Lubrizol Advanced Material The Chemours Company Swift Pork Company Ford Motor Co. Rohm & Haas Clariant Corporation Haier US Appliance Solutions I

Rank	Customer Name	FY	15 Wastewater Billed	Percent Total Wastewater Revenue
1	Lubrizol Advanced Material	\$	2,403,315	1.38%
2	Early Times Distillery		1,993,992	1.15%
3	Swift & Company		1,671,739	0.96%
4	Heaven Hill Distilleries		1,479,429	0.85%
5	Ford Motor Co.		1,448,638	0.83%
6	Louisville Metro Housing Authority		1,297,997	0.75%
7	UPS Air District		1,108,602	0.64%
8	Sunopta Ingredients Group		957,081	0.55%
9	General Electric		824,136	0.47%
10	BYK Additives Inc		444,961	0.26%
	Total		13,629,890	7.84%
	Total FY 15 Jefferson Wastewater Revenue:	\$	173,895,000	

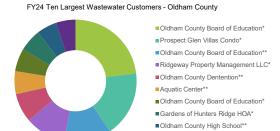


FY15 Ten Largest Drainage Customers - Jefferson County

Louisville and Jefferson County Metropolitan Sewer District Schedule 12 - Ten Largest Wastewater Customers - Oldham County **Current Year and Nine Years Ago**

Rank	Customer Name	FY 24	Wastewater Billed	Percent Total Wastewater Revenue
1	Oldham County Board of Education*	\$	95.351	1.31%
2	Prospect Glen Villas Condo*		72,100	0.99%
3	Oldham County Board of Education**		51,587	0.71%
4	Ridgeway Property Management LLC*		44,982	0.62%
5	Oldham County Dentention**		31,709	0.44%
6	Aquatic Center**		25,139	0.35%
7	Oldham County Board of Education*		25,058	0.35%
8	Gardens of Hunters Ridge HOA*		24,345	0.34%
9	Oldham County High School**		21,988	0.30%
10	Green Valley**		21,409	0.29%
	Total		413,667	5.70%

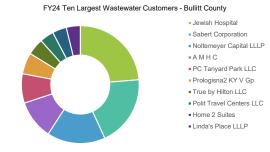
Total FY 24 Oldham Wastewater Revenue: \$ 7,259,936 MSD acquired the Oldham County Environmental Authority on June 30, 2020. Information for nine years ago is unavailable. *Louisville Water Company customer **Oldham County Water customer



■ Green Valley**

Louisville and Jefferson County Metropolitan Sewer District Schedule 13 - Ten Largest Wastewater Customers - Bullitt County Current Year and Nine Years Ago

Rank	Customer Name	FY 2	4 Wastewater Billed	Percent Total Wastewater Revenue
1	Jewish Hospital	\$	378.300	7.98%
2	Sabert Corporation	Ψ.	311.384	6.57%
3	Noltemeyer Capital LLLP		255,398	5.39%
4	AMHC		171.026	3.61%
5	PC Tanyard Park LLC		129,072	2.72%
6	Prologisna2 KY V Gp		93,595	1.98%
7	True by Hilton LLC		72,314	1.53%
8	Polit Travel Centers LLC		62,041	1.31%
9	Home 2 Suites		61,784	1.30%
10	Linda's Place LLLP		61,561	1.30%
	Total		1,596,475	33.69%
	Total FY 24 Bullitt Wastewater Revenue:	\$	4,738,101	



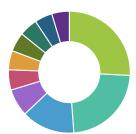
MSD acquired the Bullitt County Sanitation District on November 30, 2021. Information for nine years ago is unavailable.

Louisville and Jefferson County Metropolitan Sewer District Schedule 14 - Ten Largest Drainage Customers - Jefferson County Current Year and Nine Years Ago

Rank	Customer Name	F	Y 24 Drainage Billed	Percent Total Drainage Revenue
1	Regional Airport Authority	\$	1,827,709	1.82%
2	United Parcel Serivce		1,618,170	1.61%
3	Jefferson County Board of Education		1,004,293	1.00%
4	Ford Motor Co.		509,895	0.51%
5	LIT Industrial Limited Partnership		380,899	0.38%
6	KY State Fair Board		360,472	0.36%
7	Regional Airport Authority		357,407	0.36%
8	Haier US Appliance Solutions Inc		343,115	0.34%
9	The U of L Campus		331,978	0.33%
10	Churchill Downs Inc		327,715	0.33%
	Total Total FY 24 Jefferson Drainage Revenue:	\$	7,061,654 100.364.808	7.04%

Rank	Customer Name	FY	′ 15 Drainage Billed	Percent Total Drainage Revenue
1	Regional Airport Authority	\$	1,152,439	2.00%
2	United Parcel Serivce	•	611.250	1.63%
3	Jefferson County Board of Education		498,098	1.03%
4	Ford Motor Co.		397,235	0.51%
5	KY State Fair Board		248,975	0.40%
6	Churchill Downs Inc		226,679	0.39%
7	LIT Industrial Limited Partnership		200,558	0.36%
8	U of L Belknap Campus		179,562	0.33%
9	Seaboard System RR-00822		168,402	0.32%
10	Lou/Jeff Cty Redevelopment Authority		165,284	0.31%
	Total		3,848,482	7.46%
	Total FY 15 Jefferson Drainage Revenue:	\$	51,567,000	

FY24 Ten Largest Drainage Customers - Jefferson County



- Regional Airport Authority
- United Parcel Serivce
- Jefferson County Board of Education
- Ford Motor Co.
- LIT Industrial Limited Partnership
- KY State Fair Board
- Regional Airport Authority
- Haier US Appliance Solutions Inc
- The U of L Campus
- Churchill Downs Inc

FY15 Ten Largest Drainage Customers - Jefferson County



- Regional Airport Authority
- United Parcel Serivce
- Jefferson County Board of Education
- Ford Motor Co.
- KY State Fair Board
- Churchill Downs Inc
- LIT Industrial Limited Partnership
- U of L Belknap Campus
- Seaboard System RR-00822
- Lou/Jeff Cty Redevelopment Authority

Louisville and Jefferson County Metroplitan Sewer District Schedule 15 - Debt Service Coverage Overview

MSD's Sewer Revenue Bond Resolution adopted on December 7, 1992 and amended on March 4, 1993, June 30, 1993, December 14, 1994, January 25, 1996, and February 24, 2003 (the Amended Resolution), and its supplements, requires MSD to fix, establish, maintain, and collect rates and charges for the services of the system suffifcient to produce Available Revenues, as defined in the Amended Resolution, to pay for each fiscal year the sum of 110% of Aggregate Net Debt Service, any amount required to be paid into the reserve account, all Opearting Expenses, an amount equal to the debt serivce on senior subordinated and subordinated debt, and any amounts necessary to pay and discharge all charges or liens.

Available Revenues, as used only for purposes of the above rate covenant, means all revenues and other amounts received by MSD and pledged as security for payment of bonds issued pursuant to the Amended Resolution, but excludes any interest income which is capitalized in accordance with generally accepted accounting principles.

Operating Expenses includes all reasonable, ordinary, usual or necessary current expenses of maintenance, repair and operation determined in accordance with generally accepted accounting principles and the enterprise basis of accounting. Operating Expenses does not include reserves for extraordinary maintenance and repair, nor does it include administrative and engineering expenses of MSD which are necessary or incidental to capital improvements for which debt has been issued and which may be paid from the proceeds of such debt.

Aggregate Net Debt Service is aggregate current principal and interest requirements on all bonds issued pursuant to the Amended Resolution, excluding (i) interest expense, which in accordance with generally accepted accounting principles, is capitalized and which may be paid from the proceeds of debt, and (ii) other amounts, if any, available, or expected to become available in the ordinary course for payment of principal and interest, and not included in Available Revenues.

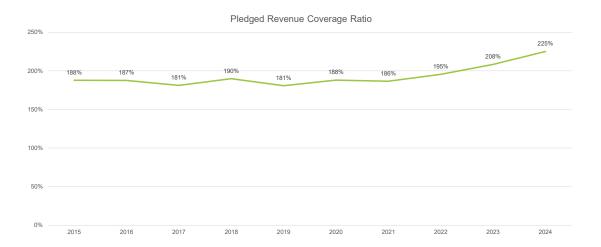
Bonds issued under the Amended Resolution and its supplements are special and limited obligations of MSD payable solely from pledged property. Pledged property includes the proceeds of the sale of bonds, all revenues, all amounts on deposit in the funds or accounts established under the amended resolution and such other amounts as may be pledged by MSD. The coverage ratio for pledged property uses operating expenses as defined above and excludes all subordinate debt service.

Debt serivce coverage rates are presented both for pledged revenue and for total debt.

Louisville and Jefferson County Metropolitan Sewer District Schedule 15a - Comparative Schedule of Pledged Revenue Coverage Years Ended June 30 Dollars in Thousands

							Fiscal '	Yea	ır							
		2015	2016	2017	2018	2019			2020	202	1	2	022	2023		2024
Revenues:																
Service charges	\$	225,462 \$	238,480 \$	253,943 \$	274,504 \$		9,173	3	312,859 \$	(25,717 \$		356,870 \$		163 \$	414,192
Other operating income		4,407	4,810	5,691	4,645		5,195		6,198		3,701		8,497		363	12,083
Assessments		1,901	9,457	1,375	1,232		1,258		909		799		583		129	385
Investment income		17,623	17,278	14,273	16,531	1	8,692		15,600		12,175		8,877	18,	303	23,063
Less: capitalized investment income		-	-	-	-		-		-		-		-		-	-
Total revenues	_	249,393	270,025	275,282	296,912	31	4,318		335,566		42,392		374,827	411,	058	449,723
Operating expenses:																
Service and administrative costs ¹		106,301	117,671	119.586	131,948	14	2.082		149.945		51.527		161.144	165.	792	178,716
Less: capitalized overhead		(30,056)	(30,516)	(31,949)	(38,148)		8,383)		(39,643)		41,785)		(42,166)	(41,		(40,786)
Capitalization rate		28%	26%	27%	29%		27%		26%		28%		26%	:	25%	23%
Net operating expenses	_	76,245	87,155	87,637	93,800	10	3,699		110,302		09,742		118,978	124,	641	137,930
Net revenues	_	173,148	182,870	187,645	203,112	21	0,619		225,264	- 2	32,650		255,849	286,	117	311,793
Aggregate debt service:																
Current maturities - senior lien		29,415	31,825	33.655	33,906	4	0,358		40.637		43.802		51,597	52.	338	52,509
Interest expense - senior lien		83,404	86,818	90,117	95,041	9	4,831		92,274		93,067		86,792	91,	736	98,705
Less: capitalized interest expense		(20,511)	(21,051)	(20,074)	(21,859)	(1	8,582)		(13,043)		12,050)		(7,464)	(6,	961)	(12,749)
Aggregate net debt service	\$	92,308 \$	97,592 \$	103,698 \$	107,088 \$	11	6,607	ò	119,868 \$		24,819 \$		130,925 \$	137,	613 \$	138,465
Pledged revenue coverage ratio		188%	187%	181%	190%		181%		188%		186%		195%	2	08%	225%

¹Excludes the actuarial portion of changes to GASB 68 pension expense and GASB 75 OPEB expense for the year.

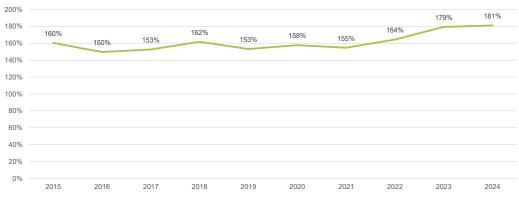


Louisville and Jefferson County Metropolitan Sewer District Schedule 15b - Comparative Schedule of Total Debt Service Coverage Years Ended June 30 Dollars in Thousands

							Fiscal Y	'ea	r					
	2015		2016	2017		2018	2019		2020	2021		2022	2023	2024
Revenues:											_			
Service charges	\$ 225,46	2 \$	238,480	\$ 253,943	\$	274,504	\$ 289,173	\$	312,859	\$ 325,717	\$	356,870	\$ 385,163	\$ 414,192
Other operating income	4,40	7	4,810	5,691		4,645	5,195		6,198	3,701		8,497	6,863	12,083
Investment income	17,62	3	17,278	14,273	3	16,531	18,692		15,600	12,175		8,877	18,603	23,063
Total revenues	247,49	2	260,568	273,907		295,680	313,060		334,657	341,593		374,244	410,629	449,338
Total operating expenses ¹	106,30	1	117,671	119,586	:	131,948	142,082		149,945	151,527		161,144	165,792	178,716
Less: capitalized overhead	(30,05		(30,516)	(31,949		(38,148)	(38,383)		(39,643)	(41,785)		(42,166)	(41,151)	(40,786)
Net operating expenses	76,24	5	87,155	87,637	,	93,800	103,699		110,302	109,742	_	118,978	124,641	137,930
Net revenues	171,24	7	173,413	186,270)	201,880	209,361		224,355	231,851	_	255,266	285,988	311,408
Debt service:														
Current maturities - senior lien	29,41	5	31,825	33,655	i	33,906	40,358		40,637	43,802		51,597	52,880	52,375
Current maturities - subordinate	9	2	96	99)	102	105		1,202	2,190		1,927	2,532	17,298
Interest expense - senior lien	83,40	4	86,818	90,117	•	95,041	94,831		92,274	93,067		86,792	91,736	98,705
Interest expense - subordinate	14,34	7	18,115	18,243	}	17,598	19,966		21,154	22,896		22,375	19,325	16,356
Less: capitalized interest expense	(20,51	1)	(21,051)	(20,074	-)	(21,859)	(18,582)		(13,043)	(12,050)		(7,464)	(6,961)	(12,749)
Net debt service	\$ 106,74	7 \$	115,803	\$ 122,040	\$	124,788	\$ 136,678	\$	142,224	\$ 149,905	\$	155,227	\$ 159,512	\$ 171,985
Total debt service coverage ratio	160	%	150%	1539	6	162%	153%		158%	155%	_	164%	179%	181%

¹Excludes the actuarial portion of changes to GASB 68 pension expense and GASB 75 OPEB expense for the year.



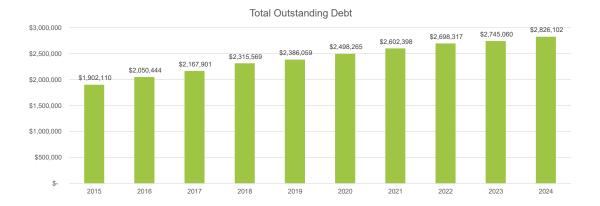


Schedule 16 - Comparative Schedule of Credit Rating History Years Ended June 30

					Fisca	l Year				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
S&P Global										
Long-term Short-term (BAN) Short-term (CP)	AA Stable SP-1+ Not Rated	AA Positive SP-1+ Not Rated	AA Positive SP-1+ Not Rated	AA Stable SP-1+ A-1+ Stable	AA Stable Not Rated A-1+ Stable					
Moody's Long-term Short-term (BAN) Short-term (CP)	Aa3 Positive MIG 1 Not Rated	Aa3 Stable MIG 1 Not Rated	Aa3 Stable MIG 1 Not Rated	Aa3 Stable MIG 1 P-1 Enhanced	Aa3 Stable Not Rated P-1 Enhanced					
Fitch Long-term	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable	AA- Stable

Louisville and Jefferson County Metropolitan Sewer District Schedule 17 - Comparative Schedule of Outstanding Debt Years Ended June 30 Dollars in Thousands

										Fiscal	l Ye	ear								
		2015		2016		2017	2	018		2019		2020		2021		2022		2023		2024
Senior debt:																				
Series 2005A	\$	-	\$	-	\$	_	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Series 2006A		87,290		-		-		-		-		-		-		-		-		-
Series 2007A		45,815		44,425		42,965		-		-		-		-		-		-		-
Series 2008A		99,850		97,860		65,520		-		-		-		-		-		-		-
Series 2009A		47,280		41,485		13,040		6,640		-		-		-		-		-		-
Series 2009B		150,900		136,115		69,725		52,975		35,155		-		-		-		-		-
Series 2009C		180,000		180,000		180,000	1	80,000		180,000		180,000		180,000		180,000		180,000		180,000
Series 2010A		330,000		330,000		330,000	3	30,000		330,000		330,000		330,000		330,000		330,000		330,000
Series 2011A		256,490		254,590		252,610	2	50,565		248,440		246,225		243,910		-		-		-
Series 2013A		115,790		115,790		115,790	1	15,790		115,790		115,790		117,480		115,790		-		-
Series 2013B		119,515		118,255		116,940	1	15,550		114,100		112,575		109,280		109,280		107,515		89,300
Series 2013C		99,875		99,750		99,625		99,500		99,375		99,250		250		125		-		-
Series 2014A		80,000		79,950		79,900		79,850		79,800		79,750		79,700		79,650		79,600		77,280
Series 2015A		-		175,000		174,280	1	73,735		173,360		173,160		172,175		171,395		170,845		168,525
Series 2015B		-		81,350		79,085		76,685		74,160		71,515		68,815		65,975		62,995		59,865
Series 2016A		-		-		150,000	1	49,760		149,530		149,290		148,415		147,500		146,540		145,470
Series 2016B		-		-		28,095		28,095		25,825		23,915		21,960		19,910		17,830		16,585
Series 2016C		-		-		67,685		73,415		67,685		50,515		32,305		12,995		-		-
Series 2017A		-		-		-		69,270		169,270		161,895		155,790		149,390		143,280		138,035
Series 2017B		-		-		-		34,520		33,670		32,885		32,055		31,210		30,245		13,505
Series 2018A		-		-		-		60,380		60,380		60,380		60,380		60,380		60,380		60,380
Series 2019A		-		-		-		-		-		24,770		17,065		8,845		-		-
Series 2020A		-		-		-		-		-		-		224,750		224,000		223,000		221,355
Series 2020B		-		-		-		-		-		-		-		-		-		33,137
Series 2020C		-		-		-		-		-		-		110,790		109,605		108,415		37,790
Series 2021A		-		-		-		-		-		-		-		240,485		227,720		214,665
Series 2022A		-		-		-		-		-		-		-		224,750		224,250		223,500
Series 2023A		-		-		-		-		-		-		-		-		49,745		49,745
Series 2023B		-		-		-		-		-		-		-		-		41,950		41,950
Series 2023C		-		-		-		-		-		-		-		-		-		348,380
Total senior debt		1,612,805		1,754,570		1,865,260	1,9	96,730		1,956,540		1,911,915	2	2,105,120		2,281,285		2,204,310		2,449,467
Cubardinata dabti																				
Subordinate debt:		226 240		226 240		226 240		26 240		226 240		226 240		226 240		226 240		226 240		
Bond anticipation note		226,340		226,340		226,340		26,340		226,340 120,000		226,340		226,340		226,340		226,340		212 105
Commercial paper		-		-		-		-		120,000		255,000 100		150,000		50,000		165,000		212,195
Notes payable		-		-		-		-		100		1,155		- 785		400		-		-
Series 2009 GO bonds Series 2014 GO bonds		-		-		-		-		-		7,865		7,445		7,010		6,565		6,105
Series 2017 GO bonds		-		-		-		-		-		3,433		3,399		3.364		3,329		2,882
		-		-		-		-		-		2,180		2,030		1,870				1,525
Financing lease Loan A09-41		2,168		2,072		1,973		1,871		1,767		1,659		1,548		1,433		1,700 1,315		1,193
Loan A10-04		2,100		2,072		1,973		1,0/1		1,767		1,059		1,840		1,702		1,563		1,193
Loan A10-04 Loan A10-05		-		-		-		-		-		715		670		622		574		524
Loan A10-06		-		-		-		-		-		81		76		70		64		324
Loan A10-07		-		-		-		-		-		1,821		1,703		1,581		1,457		1,332
Loan A11-15		-		-		-		-		-		466		434		402		369		335
Loan A12-29		-		-		-		-		-		5.520		5.228		4.932		4.630		4,323
Loan A17-028		-		-		-		-		-		2,013		2,084		2,084		2,084		7,400
Loan A18-010		-		-		-		-		-		1,116		1,092		1,045		996		948
Loan A98-04				-		-		-		891		454		1,092		1,045		990		540
Loan A19-015		-		_		_		-		031		454		-		2,640		2,528		2,414
Loan A19-028		-		-		-		-		-		-		17,788		22,918		23.705		22,700
Loan B10-01		-		-		-		-		-		-		17,700		236		23,703		182
Loan B10-04		-		-		-		-		-		-		-		262		236		210
Loan B15-006				-				-		-		-		-		70		66		62
Total subordinate debt		228,508		228,412		228,313	-	28,211		349,098		511,891		422,461	—	328,982		442,731		265,750
Total senior and subordinate debt		1,841,313		1,982,982		2,093,573		24,941		2,305,638		2,423,806		2,527,581		2,610,267		2,647,041		2,715,217
Unamortized bond premiums		(1,495)		(1,431)		(1,011)		(963)		(916)		(868)	4	(1,101)		(1,052)		(1,004)		(955)
Unamortized bond discounts		62,292		68,893		75,339		91,591		81,337		75,326		75,918		89,102		99,023		111,840
Total debt	\$	1,902,110	\$	2,050,444	\$	2,167,901		15,569	\$	2,386,059	\$	2,498,265	\$ 2	2,602,398	\$	2,698,317	\$	2,745,060	\$	2,826,102
. Juli Mobi	Ψ	1,002,110	Ψ	2,000,444	Ψ	-,107,001	Ψ ∠,	,505	Ψ	_,000,008	Ψ	2,700,200	Ψ 4	_,502,550	Ψ	_,000,017	Ψ	2,170,000	Ψ	2,020,102
Total debt as percentage of personal																				
income		5.4%		5.7%		5.8%		5.9%		5.9%		5.7%		5.3%		5.4%		5.5%		5.5%
Debt Per Capita	\$	2.49		2.67	\$	2.81		3.01	\$	3.11			\$		\$	3.49	\$		\$	3.66
	Ÿ	2.40	Ÿ	2.07	~	2.01	¥	0.01	Ÿ	0.11	Ψ	0.10	Ψ.	5.00	~	0.43	Ψ.	0.00	Ψ.	5.00



Louisville and Jefferson County Metropolitan Sewer District Schedule 18 - Schedule of Future Principal and Interest Payments ¹ Dollars in Thousands

	Senior Revenue Bonds ¹			Seni	or Subordinate Bor	ıds ²	Subo		AII	
Fiscal Year										Total Debt
Ending	Principal	Interest	Total	Principal	Interest*	Total	Principal	Interest	Total	Service
2025	53,985,000	102,639,532	156,624,532	-	-	-	3,475	1,243	4,719	156,629,251
2026	54,535,000	100,312,107	154,847,107	-	-	-	3,560	1,155	4,715	154,851,822
2027	73,245,000	98,068,701	171,313,701	-	-	-	3,646	1,064	4,710	171,318,411
2028	71,825,000	94,459,322	166,284,322	-	-	-	3,727	972	4,699	166,289,021
2029	74,235,000	92,194,380	166,429,380	-	-	-	3,819	877	4,696	166,434,076
2030	55,299,212	90,687,341	145,986,553	-	-	-	3,906	780	4,685	145,991,238
2031	34,863,439	88,796,535	123,659,973	-	-	-	3,456	684	4,140	123,664,114
2032	35,866,281	87,376,535	123,242,816	-	-	-	3,236	600	3,836	123,246,652
2033	36,799,174	85,930,417	122,729,591	-	-	-	3,229	522	3,752	122,733,343
2034	106,737,465	84,587,642	191,325,107	-	-	-	2,861	448	3,309	191,328,416
2035	96,410,464	81,332,916	177,743,380	-	-	-	2,846	381	3,227	177,746,607
2036	103,953,863	76,912,703	180,866,566	-	-	-	2,243	324	2,567	180,869,133
2037	119,226,972	72,145,644	191,372,617	-	-	-	2,092	277	2,369	191,374,986
2038	124,100,139	67,446,624	191,546,762	-	-	-	1,935	234	2,169	191,548,931
2039	128,828,017	62,723,787	191,551,805	-	-	-	1,970	192	2,163	191,553,968
2040	133,672,341	56,050,372	189,722,713	-	-	-	2,009	150	2,159	189,724,872
2041	138,720,688	49,061,514	187,782,201	-	-	-	2,015	107	2,122	187,784,323
2042	144,134,443	41,578,143	185,712,586	-	-	-	1,939	64	2,002	185,714,589
2043	149,763,609	33,797,322	183,560,931	-	-	-	1,157	23	1,179	183,562,110
2044	125,395,526	25,697,058	151,092,584	-	-	-	434	6	441	151,093,025
2045	130,358,740	21,439,313	151,798,053	-	-	-		-	-	151,798,053
2046	134,747,305	17,052,766	151,800,070	-	-	-		-	-	151,800,070
2047	101,522,532	12,355,033	113,877,566	_		-	-	-	-	113,877,566
2048	67,940,934	8,836,380	76,777,315	_		_		_	_	76,777,315
2049	31,036,224	6,332,265	37,368,488	_		_		_	_	37,368,488
2050	32,117,974	5,116,137	37,234,111	_		_		_	_	37,234,111
2051	26,695,841	3,851,208	30,547,049	_		_		_	_	30,547,049
2052	25,719,825	2,690,762	28,410,588	_		_		_	_	28,410,588
2053	23,795,277	1,534,520	25,329,797	_		_		_	_	25,329,797
2054	2,446,850	406,950	2.853.800	_	_		_		_	2,853,800
2055	2,504,893	348,272	2,853,165	_	_		_		_	2,853,165
2056	2,564,063	288,205	2.852.267	_		_			_	2,852,267
2057	2,624,707	226,718	2,851,424	_		_			_	2,851,424
2058	2,687,173	163,772	2,850,945	-	_	_	_	_	-	2,850,945
2059	2,750,772	99,332	2,850,104	-				_	-	2,850,104
2059	2,815,852	33,368	2,849,219	-				_	-	2,849,219
	2,453,925,593	1,572,573,596	4,026,499,188	-	-		53,555	10,104	63,659	4,026,562,847

¹Principal includes interest capitalized during the capitalized interest period described in the WIFIA Loan Agreement for the Series 2020B bonds. ²Excludes outstanding commercial paper and net swap payments due under the existing swap agreements.

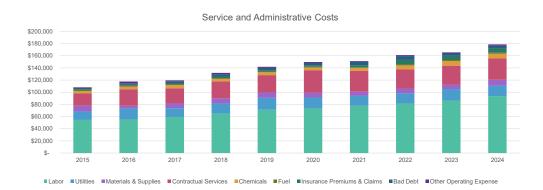
Louisville and Jefferson County Metropolitan Sewer District Schedule 19 - Comparative Schedule of Capital Assets Years Ended June 30 Dollars in Thousands

					Fi	scal Year				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital assets										
Sewer lines			\$ 1,440,360 \$	1,497,090 \$	1,648,891 \$	1,727,371 \$	1,761,425 \$	2,070,342 \$	2,172,413 \$	2,205,672
Wastewater treatment facilities	489,292	629,083	638,047	648,503	669,041	604,855	641,414	696,900	754,084	893,114
Drainage facilities	448,853	515,898	542,271	561,341	839,159	902,894	1,019,492	1,033,710	1,167,937	1,126,993
Pumping and lift stations	96,812	139,651	166,158	183,795	240,963	248,390	260,231	286,975	298,862	319,598
Administrative facilities	49,342	49,342	50,817	50,818	51,734	52,297	52,348	52,471	53,173	69,387
Maintenance facilities	8,037	8,504	8,504	8,504	12,074	12,074	14,301	14,576	20,572	16,623
Machinery and equipment	58,335	60,043	66,171	66,322	87,253	89,137	88,493	100,862	99,152	103,998
Miscellaneous	27,060	30,659	31,086	31,086	31,627	32,593	33,375	35,935	59,461	59,652
Prepaid regulatory assets	322,312	343,362	363,437	385,294	403,876	416,919	428,969	436,432	443,393	456,142
Intangible subscription assets		-	-	-	-	-	-	-	8,934	11,398
Total capital assets	2,777,788	3,155,695	3,306,851	3,432,753	3,984,618	4,086,530	4,300,048	4,728,203	5,077,981	5,262,577
Less accumulated depreciation & amortization	(1,008,503)	(1,070,108)	(1,146,036)	(1,218,427)	(1,326,461)	(1,358,640)	(1,466,255)	(1,568,375)	(1,671,050)	(1,797,475)
Total capital assets - net	1,769,285	2,085,587	2,160,815	2,214,326	2,658,157	2,727,890	2,833,793	3,159,828	3,406,931	3,465,102
Total construction in progress	623,181	487,674	581,222	711,655	460,501	574,867	625,113	420,200	309,372	438,652
Total net captial assets	\$ 2,392,466	\$ 2,573,261	\$ 2,742,037 \$	2,925,981 \$	3,118,658 \$	3,302,757 \$	3,458,906 \$	3,580,028 \$	3,716,303 \$	3,903,754

Louisville and Jefferson County Metropolitan Sewer District Schedule 20 - Comparative Schedule of Service and Administrative Costs Years Ended June 30 Dollars in Thousands

					Fiscal	Ye	ar				
	2015	2016	2017	2018	2019		2020	2021	2022	2023	2024
Service and administrative costs:											
Labor ¹	\$ 54,378	\$ 55,229	\$ 59,183	\$ 64,718	\$ 71,379	\$	73,476	\$ 77,789	\$ 81,552	\$ 86,469	\$ 93,868
Utilities	13,817	18,256	14,427	16,640	19,520		17,923	16,265	16,595	18,838	16,618
Materials & supplies	9,706	4,183	7,976	8,647	8,639		7,591	6,840	8,012	6,826	10,115
Contractual services	20,478	27,448	25,021	27,864	28,604		37,326	34,084	31,288	31,691	34,951
Chemicals	3,681	4,372	5,298	4,429	4,761		4,649	5,017	6,905	7,599	8,015
Fuel	1,616	1,326	1,077	1,276	1,393		1,069	1,083	1,658	1,694	1,498
Insurance premiums & claims	1,505	1,316	1,669	2,423	2,057		2,249	3,624	7,216	7,597	7,828
Bad debt	2,068	2,603	3,495	3,938	3,748		4,009	5,501	6,422	3,046	3,578
Other operating expense	 1,052	2,939	1,440	2,012	1,981		1,654	1,323	1,496	2,032	2,244
Total service and administrative costs	108,301	117,671	119,586	131,947	142,082		149,945	151,526	161,144	165,792	178,715
Less: capitalized overhead											
Capitalized project cost	 (30,056)	(30,516)	(31,949)	(38,147)	(38,383)		(39,643)	(41,785)	(42,166)	(41,151)	(40,786)
Net service and administrative costs	\$ 78,245	\$ 87,155	\$ 87,637	\$ 93,800	\$ 103,699	\$	110,302	\$ 109,741	\$ 118,978	\$ 124,641	\$ 137,929

¹Excludes the actuarial portion of changes to GASB 68 pension expense and GASB 75 OPEB expense for the year.



Louisville and Jefferson County Metroplitan Sewer District Schedule 21 - Fiscal Year 2024 Budgetary Comparison Schedule Dollars in Thousands

	Approved Budget	Actual Expenditures	Variance
Salaries & wages	64,304	65,414	(1,110)
Labor related overhead	26,894	28,454	(1,560)
Utilities	18,698	16,617	2,081
Materials & supplies	9,527	10,115	(588)
Contractual services	39,326	34,951	4,375
Chemicals	11,133	8,014	3,119
Fuel	2,050	1,498	552
Insurance premiums & claims	7,335	7,828	(493)
Bad debt	3,526	3,578	(52)
Other operating expense	2,430	2,244	186
Interest expense	108,271	109,193	(922)
·	293,494	287,906	5,588

Reconciliation between total budgetary basis expenditures and total expenses reported in statements of revenues, expenses and changes in net position:

Actual budget expenditures	287,906
Capitalized overhead	(40,786)
Depreciation and amortization expense	131,336
GASB 68 pension expense	(5,328)
GASB 75 OPEB expense	(4,658)
Capitalized interest	(12,749)
Change in fair value - derivative instruments	(5,009)
Total expenses reported in statements of revenues, expenses and changes in net position	350,712
Expenses reported in statements of revenues, expenses and changes in net position:	
Total operating expenses	259,279
Interest expense - bonds	98,705
Interest expense - swaps	1,706
Interest expense - other	14,650
Amortization of debt discount / premium	(7,312)
Amortization of loss on refunding	1,442
Capitalized interest	(12,749)
Change in fair value - derivative instruments	(5,009)
Total expenses reported in statements of revenues, expenses and changes in net position	350,712

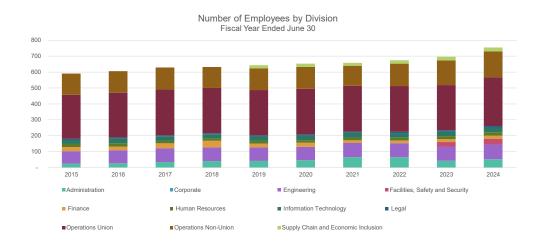
Louisville and Jefferson County Metropolitan Sewer District Schedule 22 - Comparative Schedule of Number of Employees by Division Years Ended June 30

	Fiscal Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Divison											
Administration ¹	24	26	34	40	41	45	65	64	41	51	
Corporate ²	_	-	-	_	-	-	1	1	1	1	
Engineering	79	83	86	87	86	85	88	88	90	93	
Facilities, Safety and Security ³	-	-	_	_	-	-	_	-	28	34	
Finance	25	22	32	41	23	26	17	17	18	21	
Human Resources	20	21	15	15	17	16	17	17	19	21	
Information Technology	25	29	29	26	28	28	30	29	29	31	
Legal	7	8	6	6	7	8	8	8	9	9	
Operations											
Union	277	281	288	285	285	287	287	288	283	306	
Non-Union	134	136	139	132	137	137	127	141	155	164	
Supply Chain and Economic Inclusion ⁴	-	-	-	-	19	21	18	21	23	24	
	591	606	629	632	643	653	658	674	696	755	

¹Adminstration division growth in 2021 was due to the creation of the Records & Information Governance Department in Administration by moving staff from Finance and Engineering.

Facilities, Safety and Security Divison was created by moving staff in Facilities, Saftey and Security from Adminstration.

Supply Chain and Economic Inclusion Divison was created by moving the Warehouse Department from Operations and the Procurement and Supplier Diversity Departments from Finance.



²Corporate Divison headcount occurred with the addition of a Chief Strategy Officer.

Louisville and Jefferson County Metropolitan Sewer District Schedule 23 - Comparative Schedule of Operating Statistics Years Ended June 30

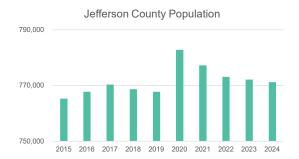
	Fiscal Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Jefferson County											
Miles of sewers	3,240	3,293	3,322	3,463	3,348	3,488	3,372	3,390	3,404	3,417	
Miles of stormwater mains	-	-	-	-	-	-	1,160	1,175	1,179	1,186	
Number of wastewater quality treatment centers	16	5	5	5	5	5	5	5	5	5	
Daily average treatment in milions of gallons/day	143.0	139.0	112.0	150.0	173.0	164.0	157.0	153.0	152.9	129.0	
Daily treatment capacity in milions of gallons/day	177.0	170.0	170.0	200.0	200.0	200.0	200.0	200.0	203.0	203.0	
Oldham County ²											
Miles of sewers	-	-	-	-	-	-	135	145	145	130	
Number of wastewater treatment plants	-	-	-	-	-	-	8	8	8	7	
Daily average treatment in milions of gallons/day	-	-	-	-	-	-	2.0	2.0	2.7	1.5	
Daily treatment capacity in milions of gallons/day	-	-	-	-	-	-	4.3	4.3	4.3	4.0	
Bullitt County ³											
Miles of sewers	-	-	-	-	-	-	-	54	58	57	
Number of wastewater treatment plants	-	-	-	-	-	-	-	7	8	7	
Daily average treatment in milions of gallons/day	-	-	-	-	-	-	-	1.0	1.5	1.3	
Daily treatment capacity in milions of gallons/day	-	-	-	-	-	-	-	2.0	1.7	1.7	

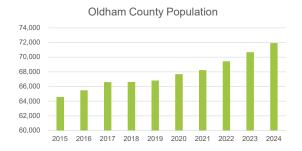
¹Prior historical data is unavailable. ²MSD acquired the Oldham County Environmental Authority on June 30, 2020. Prior historical data is unavailable. ³MSD acquired the Bullitt County Sanitation District on November 30, 2021. Prior istorical data is unavailable.

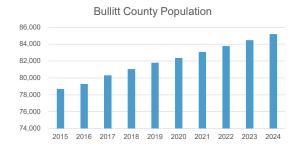
Louisville and Jefferson County Metropolitan Sewer District Schedule 24 - Comparative Schedule of Demographic and Economic Statistics Years Ended June 30

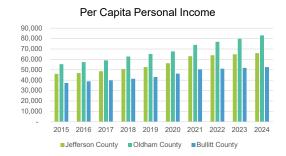
					Fiscal	Year				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Jefferson County										
Population ¹	765,322	767,770	770,383	768,706	767,785	782,845	777,251	773,095	772,144	771,194
Per Capita Personal Income ²	46,241	47,010	48,637	50,806	52,686	56,306	63,117	64,075	65,048	66,035
Personal Income ^{3 (in thousands)}	35,389,255	36,092,868	37,469,118	39,054,877	40,451,521	44,078,871	49,057,751	49,536,062	50,226,068	50,925,686
Unemployment Rate ⁴	5.4%	4.5%	5.1%	4.5%	4.6%	6.6%	5.2%	4.4%	4.2%	4.6%
Oldham County										
Population ¹	64,586	65,487	66,606	66,632	66,818	67,693	68,238	69,444	70,671	71,920
Per Capita Personal Income ²	55,523	57,444	59,187	62,769	65,218	67,763	74,104	76,988	79,984	83,097
Personal Income ^{3 (in thousands)}	3,586,008	3,761,835	3,942,209	4,182,424	4,357,736	4,587,081	5,056,709	5,346,355	5,652,591	5,976,369
Unemployment Rate ⁴	4.9%	3.5%	4.1%	3.5%	3.7%	4.2%	4.3%	3.5%	3.8%	4.1%
Bullitt County										
Population ¹	78,698	79,283	80,309	81,040	81,803	82,366	83,073	83,774	84,481	85,194
Per Capita Personal Income ²	37,394	38,930	39,907	41,427	43,199	46,371	50,450	51,198	51,957	52,727
Personal Income ^{3 (in thousands)}	2,942,833	3,086,487	3,204,891	3,357,244	3,533,808	3,819,394	4,191,033	4,289,061	4,389,383	4,492,050
Unemployment Rate ⁴	5.3%	4.1%	4.9%	4.7%	4.7%	5.2%	5.2%	4.5%	4.1%	4.4%

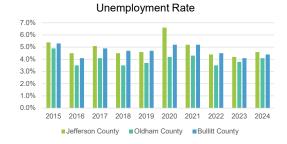
¹Source: U.S. Census Bureau, Resident Population in Jefferson County, KY [KYJEPOP], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/KYJEPOP, June 14, 2024. Data has been updated from last year's Annual Comprehensive Financial Report with newly available data. Population for











²⁰²⁴ calculated by mulitplying the estimated 2023 population by the 2022 to 2023 population growth rate.

²⁰²⁴ deliculated by multiplying in estimated 2229 population by the 2022 of Experience (222 population) and 2022 of Experience (222 population) by the 202 Personal Income for 2024 and 2023 calculated using the 2021 to 2022 income growth rate

³Equals (Population * Per Capita Personal Income) / 1,000.

^{*}Source:U.S. Bureau of Labor Statistics, Unemployment Rate in Jefferson County, KY [KYJEURN], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/KYJEURN, August 8, 2024. Data has been updated from last year's Annual Comprehensive Financial Report with newly available data.

Louisville and Jefferson County Metropolitan Sewer District Schedule 25 - Jefferson County Principal Employers Current Year and Nine Years Ago

		2015		2024				
			Percentage of			Percentage of		
			Total MSA			Total MSA		
Employer ¹	Rank	Employees	Employment	Rank	Employees	Employment		
United Parcel Service, Inc.	1	22,189	3.7%	1	24,000	3.7%		
Norton Healthcare (formerly Alliant Health)	4	10,739	1.8%	2	16,785	2.6%		
UofL Health Inc.	-	N/A	0.0%	3	14,654	2.3%		
Jefferson County Public Schools	2	14,719	2.4%	4	14,000	2.2%		
Ford Motor Company	5	9,028	1.5%	5	12,531	1.9%		
Baptist Healthcare System	-	N/A	0.0%	6	11,085	1.7%		
Humana, Inc.	3	12,900	2.1%	7	10,000	1.5%		
GE Appliances, a Haier company	7	6,000	1.0%	8	8,400	1.3%		
University of Louisville	6	6,264	1.0%	9	7,302	1.1%		
Walmart, Inc.	-	N/A	0.0%	10	7,000	1.1%		
Kentucky One Health	8	6,000	1.0%	-	N/A	0.0%		
Amazon.com	9	6,000	1.0%	-	N/A	0.0%		
Louisville-Jefferson County Metro Government	10	5,584	0.9%	-	N/A	0.0%		
Total		99,423	16%		125,757	19%		
Total Employment, Louisville MSA ²		602,845			646,807			

¹Source: Business First of Louisville, KY ²Source: US Bureau of Labor Statistics

Cover photo: MSD's Cedar Creek Water Quality Treatment Center Jefferson County, KY



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