Monthly Executive Report

Financial & Capital Program Updates

As of February 28, 2023



NOTE TO THE READER:

The following Monthly Executive Report is prepared and used by Louisville MSD for purposes of updating its governing Board of Directors of various operational and financial matters regarding Louisville MSD on a monthly basis. The Report is not prepared to help investors decide whether to purchase or sell financial obligations of Louisville MSD. As such, the Report contains unaudited financial information that may change after the date of the Report. In addition, the Report contains forward-looking statements in the form of financial and operating budgets, performance targets, and other information. These statements are not a guarantee of future performance and actual results may differ. Investors should not consider the enclosed Report a recommendation to purchase or sell financial obligations of Louisville MSD. The Report does not present a complete summary of Louisville MSD's financial or operational position to investors and should not be used in that manner.

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Acronyms & Abbreviations

B Billions

BCE Business Case Evaluation
BOD Biochemical Oxygen Demand
BMP Best Management Practice

BRIC Building Resilient Infrastructure & Communities Grant Program

CCWQTC Cedar Creek Water Quality Treatment Center

CD Consent Decree

CIP Capital Improvement Program
CMF Centralized Maintenance Facility

CMOM Capacity, Management, Operations, and Maintenance Program

CP Commercial Paper

CRRP Critical Repair and Replacement Plan

CSF Critical Success Factor
CSO Combined Sewer Overflow
CSS Combined Sewer System
DOW Kentucky Department of Water

DRGWQTC Derek Guthrie Water Quality Treatment Center

DRI Drainage Response Initiative
EAC Estimate-at-Completion
EAP Early Action Plan

ENV Environmental

EPA Environmental Protection Agency EPM Enterprise Program Manager

FEMA Federal Emergency Management Agency

FEPS Final Effluent Pump Station

FFWQTC Floyds Fork Water Quality Treatment Center

FM Force Main

FPS Flood Pump Station

FY Fiscal Year

GASB General Accounting Standards Board
GIS Geographical Information System

HCWQTC Hite Creek Water Quality Treatment Center

HSE Health and Safety Evaluation

HVAC Heating, Ventilation, and Air Conditioning
ID Project Budget Identification Number
IOAP Integrated Overflow Abatement Plan

IT Information Technology

KPDES Kentucky Pollutant Discharge Elimination System
LG Louisville Green Biosolids Processing System
LOJIC Louisville Jefferson County Information Center

LTCP Long Term Control Plan
LWC Louisville Water Company

M Millions

MBE/WBE Minority Owned Business Enterprise/Women Owned Business Enterprise

MCC Motor Control Center

MEB Morris Forman WQTC Maintenance Equipment Building

MHI Median Household Income

MFWQTC Morris Forman Water Quality Treatment Center MS4 Municipal Separate Storm Sewer System Program

MSD Metropolitan Sewer District NMC Nine Minimum Controls

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Acronyms & Abbreviations - Continued

NOA Notice of Advisement
NOI Net Operating Income
NTP Notice to Proceed
OC Oldham County

OCEA Oldham County Environmental Agency

PM Project Manager

PMIS Project Information Management System

PSC Property Service Connection

PS Pump Station Q Quarter of Year

RAS Return Activated Sludge RFP Request for Proposals RR Repair and Replacement

RTC Real Time Control

SCADA Supervisory Control and Data Acquisition

SIFMA Securities Industry and Financial Markets Association

SRF State Revolving Loan Fund Program

SSDP Sanitary Sewer DP

SWPS Southwestern Pump Station

TBD To Be Determined
TSS Total Suspended Solids

USACE United States Army Corps of Engineers

USEPA United States Environmental Protection Agency

VFD Variable Frequency Drive

WIFIA Water Infrastructure Finance and Innovation Act

WQTC Water Quality Treatment Center
WWTF Wet Weather Treatment Facility
WWPS Wastewater Pump Station

YTD Year-to-Date

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SECTION 1: EXECUTIVE SUMMARY

The Louisville and Jefferson County Metropolitan Sewer District (MSD) provides wastewater, stormwater and flood protection services to a population of nearly 800,000 throughout the service area. The MSD operating budget supports the day-to-day operation and maintenance of all infrastructure, while the capital budget supports the infrastructure investments through its Capital Improvement Program (CIP). The organization continues to complete important projects; comply with Consent Decree and regulatory requirements; and repair/replace critical assets. This report provides a summary of the financial position and the progress made through February 2023, with respect to Fiscal Year 2023 (FY23) program health and regulatory compliance.

FINANCIAL HEALTH

A high-level summary of key financial information is presented in the table below. More detailed information is presented in Section 2 of this report.

Summary of FY23 Financial Information

Description	Status as of February 28, 2023
Operating Revenues	Total Operating Revenues are \$10.6 million favorable to budget year-to-date. Wastewater service charges account for \$8.0 million of this budget variance.
Operating Expenses	Total Operating Expenses are \$8.1 million favorable to budget year-to-date. Salaries and labor-related overhead account for \$4.5 million of the savings to budget. Contract Services and Chemicals make up the majority of the remainder.
Interest Expense	Total Interest Expense is \$7.1 million favorable to budget year-to-date. This savings is being driven by lower swap interest payments.
Statement of Cash Flows	Cash and cash equivalents increased \$8.9 million in February. Net cash provided by operating activities was \$16.4 million. Net cash used by capital-related financing activities was \$18.1 million, primarily to fund construction in process. Net cash provided by investing activities was \$10.6 million as investments matured.
Commercial Paper Notes	Commercial paper notes outstanding total \$100 million with an average term of 93 days.

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CAPITAL PROGRAM HEALTH

A high-level summary of the status of key programs and initiatives is presented in the table below. More detailed information is presented in Section 3 of this report.

Summary of FY23 Capital Program Performance To-date

Key Programs and Initiatives	Status as of February 28, 2023
Consent Decree and Agreed Order Compliance	All Consent Decree and Agreed Order deadlines have been satisfied through the reporting period.
Emergency Repairs & Reactive Equipment Replacements	Two (2) emergency projects started in the reporting period. Emergencies include a sewer repair at 715 E. Gray Street due to Verizon Telecommunications boring through MSD's asset. The Liberty Street Sewer Replacement will replace approximately 2000' of 30" Brick sewer in Liberty St. The estimated cost for the two (2) emergency projects is \$5,075,000.
Cashflow Performance*	Budget Performance Target is \$191.8M as of February 28, 2023.The FY23 Spending Projection is \$175.0M
Change Management Notice of Advisements (NOAs)	Forty-eight (48) NOAs were processed this month in the following advisement categories: eighteen (18) new projects, twenty (20) EAC changes, forty-two (42) budget impact, three (3) schedule impact, and one (1) project name change. Note: A NOA can have more than one advisement category.

^{*}Discussion on Performance Target and Budget Ceiling is found in the Capital Program Performance Section

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SECTION 2: FINANCIAL REPORT

The Financial Report is prepared monthly to provide readers with a high-level understanding of MSD's financial position. This report contains information on the following:

- Monthly financial results for February 2023
- Customer Statistics
- Employee Headcount
- Cash Balances
- Investment Summary
- Commercial Paper Program Summary

FEBRUARY FINANCIAL SUMMARY

Financial Highlights for the month of February 2023

- Total operating revenues were \$4.1 million favorable to budget
- Service and administrative expenses were \$386 thousand unfavorable to budget

Results of Operations for the month of February 2023

Total operating revenues were \$4.1 million favorable to budget and \$6.4 million more than February 2022. Wastewater service charges were \$3.4 million favorable to budget and \$4.5 million than February 2022. Drainage service charges were \$578 thousand favorable to budget and \$1.7 million more than February 2022. Other operating revenues were \$120 thousand favorable to budget and \$152 thousand more than February 2022. Year to date, total operating revenues were \$10.5 million favorable to budget (wastewater service charges \$8.0 million, drainage service charges \$1.2 million and other operating income \$1.3 million). Wastewater service charges are being driven by the commercial customer class which account for \$4.0 million of the \$8.0 million budget variance, primarily due to higher billed volume charges.

Service and administrative expenses were \$387 thousand unfavorable to budget and \$492 thousand more than February 2022. Year to date, service and administrative expenses were \$8.1 million favorable to budget. Salaries and Labor Related Overhead account for \$4.5 million of the savings to budget. Contract Services and Chemicals make up most of the remaining budget savings.

Depreciation and amortization expenses were \$210 thousand unfavorable to budget and \$504 thousand more than February 2022. Year to date, depreciation and amortization expenses were \$2.6 million unfavorable to budget. Depreciation expense is being driven by the large number of capital projects that were placed in service in June of 2022 including the Waterway Protection Tunnel.

Investment income was \$414 thousand favorable to budget and \$649 thousand more than February 2022. Year to date, investment income was \$3.7 million favorable to budget.

Interest expense was \$934 thousand favorable to budget and \$635 thousand less than February 2022. Year to date, interest expense was \$7.1 million favorable to budget. Interest expense savings are being driven by lower swap payments.

Statement of Cash Flows

Cash and cash equivalents increased \$8.9 million in February. Net cash provided by operating activities was \$16.4 million. Net cash used by capital-related financing activities was \$18.1 million, primarily to fund construction in process. Net cash provided by investing activities was \$10.6 million as investments matured.

FINANCIAL STATEMENTS - FY23

Comparative Statement of Net Position

Louisville & Jefferson County Metropolitan Sewer District										
Monthly Compara	itive Statement of	Net Position								
Month En	ded, February 28	, 2023								
	YTD	YTD								
	Feb-2023	Feb-2022	Variance	Percent						
Current Assets										
Unrestricted Cash & Cash Equivalents	\$118,782,146	\$116,477,487	\$2,304,659	1.98%						
Sewer & Drainage Receivable	27,906,359	25,641,883	2,264,476	8.83%						
Assessment Warrants Receivable	183,416	183,047	368	0.20%						
Miscellaneous Receivables	1,095,108	157,674	937,435	594.54%						
Inventories	5,619,113	5,263,600	355,513	6.75%						
Prepaid Expenses	5,259,372	5,139,164	120,208	2.34%						
Restricted Funds	150,204,411	302,989,970	(152,785,559)	-50.43%						
Accrued Interest Receivable	340,553	231,208	109,345	47.29%						
Total Current Assets	309,390,477	456,084,033	(146,693,556)	-32.16%						
Non-Current Assets										
Utility Plant in Service	4,741,968,637	4,322,794,068	419,174,568	9.70%						
Accumulated Depreciation	(1,640,237,025)	(1,531,389,643)	(108,847,382)	7.11%						
Construction in Progress	527,986,222	701,153,704	(173, 167, 482)	-24.70%						
Net Fixed Assets	3,629,717,834	3,492,558,130	137,159,704	3.93%						
Non-Current Receivables	21,251,723	25,096,154	(3,844,431)	-15.32%						
Total Assets	3,960,360,034	3,973,738,316	(13,378,282)	-0.34%						
Total Deferred Outflow of Resources	69,571,279	77,168,153	(7,596,875)	-9.84%						
Total Assets & Deferred Outflow of Resources	4,029,931,313	4,050,906,470	(20,975,157)	-0.52%						
Total Assets & Deletted Outlion of Nesources	4,023,351,515	4,000,000,470	(20,370,107)	-0.0270						
Current Liabilities										
Miscellaneous Accounts Payable	6,985,708	7,817,215	(831,507)	-10.64%						
Accounts Payable - Construction	6,069,851	3,340,303	2,729,548	81.72%						
Contract Retainage	5,244,714	11,462,142	(6,217,428)	-54.24%						
Accrued Interest Payable	30,522,399	29,033,294	1,489,105	5.13%						
Current Maturities of Bonds Payable	52,880,000	51,480,000	1,400,000	2.72%						
Current Maturities of Subordinate Debt	2,419,874	1,891,792	528,082	27.91%						
Deposits Payable	1,990,231	2,410,885	(420,655)	-17.45%						
Accrued Salaries & Wages	2,263,800	1,931,702	332,097	17.19%						
Accrued Workers' Comp Insurance	1,512,835	2,455,512	(942,677)	-38.39%						
Employee Comp Absences Payable	4,935,189	4,784,234	150,954	3.16%						
Total Current Liabilities	114,824,600	116,607,080	(1,782,480)	-1.53%						
Non-Current Liabilities										
Long-Term Senior Debt Payable	2,228,405,000	2,281,285,000	(52,880,000)	-2.32%						
Long-Term Subordinate Debt Payable	375,020,628	412,481,291	(37,460,663)	-9.08%						
Other Long-Term Liability	276,864,383	334,995,777	(58, 131, 394)	-17.35%						
Total Non-Current Liabilities	2,880,290,011	3,028,762,069	(148,472,058)	-4.90%						
Total Liabilities	2,995,114,611	3,145,369,149	(150,254,537)	-4.78%						
Total Deferred Inflow of Resources	51,579,614	9,962,553	41,617,061	417.73%						
Total Liabilities & Deferred Inflow of Resources	3,046,694,225	3,155,331,701	(108,637,476)	-3.44%						
Net Position	983,237,088	895,574,768	87,662,320	9.79%						
				·						
Total Liabilities, Deferred Inflow of Resources and Net Position	4,029,931,313	4,050,906,469	(20,975,157)	-0.52%						

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Statement of Revenues, Expenses & Change in Net Position

Louisville & Jefferson County Metropolitan Sewer District Monthly Statement of Revenues, Expenses, and Changes in Net Position Month Ended, February 28, 2023										
	YTD	YTD		YTD	% YTD	YTD	YTD	% YTD		
Wastewater Charges	Actual	Budget	'	/ariance	Variance	Prior Year	Variance	Variance		
Residential	¢ 112 121 Q/7	\$ 109,067,421	\$	3,054,526	2.8%	\$ 104,447,710	\$ 7,674,237	7.3%		
Commercial	63,821,110	59,732,310	Ψ	4,088,800	6.8%	57,507,168	6,313,942	11.0%		
Industrial	16,390,084	16,076,314		313,770	2.0%	15,332,033	1,058,051	6.9%		
Other Wastewater	6,661,406	5,381,520		1,279,886	23.8%	5,489,849	1,171,557	21.3%		
Free Wastewater Charges	(3,793,328)			(1,024,936)	37.0%	(3,118,078)	(675,250)	21.7%		
Total Wastewater Charges	195,201,219	187,489,173		7,712,046	4.1%	179,658,682	15,542,538	8.7%		
Drainage										
Residential	22,880,705	22,100,129		780,576	3.5%	20,848,399	2,032,306	9.7%		
Commercial	34,951,606	34,744,943		206,663	0.6%	32,082,350	2,869,255	8.9%		
Industrial	4,121,445	3,937,387		184,058	4.7%	3,714,376	407,069	11.0%		
Other Stormwater	2,827,801	2,600,015		227,786	8.8%	2,504,960	322,841	12.9%		
Free Stormwater Charges	(1,929,829)	(1,794,175)		(135,654)	7.6%	(1,791,363)	(138,466)	7.7%		
Total Drainage Charges	62,851,728	61,588,299		1,263,429	2.1%	57,358,722	5,493,005	9.6%		
Total Service Charges	258,052,947	249,077,472		8,975,475	3.6%	237,017,404	21,035,543	8.9%		
Other Operating Income	4,299,959	3,065,124		1,234,835	40.3%	5,609,709	(1,309,750)	-23.3%		
Total Operating Revenue	262,352,906	252,142,597		10,210,309	4.0%	242,627,113	19,725,793	8.1%		
Operating Expenses										
Salaries & Wages	37,779,684	40,884,955		(3,105,270)	-7.6%	35,773,833	2,005,851	5.6%		
Labor Related Overhead	17,674,689	19,081,849		(1,407,160)	-7.4%	17,362,788	311,901	1.8%		
Utilities	12,394,312	11,706,012		688,300	5.9%	10,449,375	1,944,937	18.6%		
Materials & Supplies	5,630,389	5,915,355		(284,966)	-4.8%	4,906,636	723,753	14.8%		
Contractual Services	20,775,818	23,615,816		(2,839,998)	-12.0%	23,403,040	(2,627,221)	-11.2%		
Chemicals	4,561,790	6,169,946		(1,608,156)	-26.1%	4,045,173	516,618	12.8%		
Fuel	1,148,417	1,467,839		(319,422)	-21.8%	923,762	224,655	24.3%		
Insurance Premiums & Claims	4,734,624	4,184,964		549,660	13.1%	4,245,509	489,115	11.5%		
Bad Debt	2,769,608	2,356,864		412,744	17.5%	3,085,888	(316,280)	-10.2%		
Other Operating Expense	1,287,090	1,570,779		(283,689)	-18.1%	956,997	330,093	34.5%		
Mapping/Insurance Recovery	-	-		-	0.0%	-	0	0.0%		
Capitalized Overhead	(25,365,968)	(28,069,050)		2,703,082	-9.6%	(25,519,609)	153,641	-0.6%		
Capital Expenses (over)/under applied										
Net Service and Administrative Costs	83,390,454	88,885,329		(5,494,875)	-6.2%	79,633,391	3,757,063	4.7%		
Depreciation	71,758,020	68,973,336		2,784,684	4.0%	65,669,693	6,088,328	9.3%		
Amortization	1,042,378	1,149,067		(106,689)	-9.3%	921,864	120,514	13.1%		
Total Depreciation/Amortization	72,800,399	70,122,403		2,677,996	3.8%	66,591,557	6,208,841	9.3%		
Total Operating Expenses	156,190,852	159,007,731		(2,816,879)	-1.8%	146,224,948	9,965,904	6.8%		
Net Operating Income	106,162,054	93,134,865		13,027,189	14.0%	96,402,165	9,759,889	10.1%		
Non-Operating Revenue (Expenses)										
Gain/Loss Disposal of Assets	(737,011)	-		(737,011)	0.0%	125,827	(862,838)	-685.7%		
Investment Income	11,413,545	7,682,921		3,730,624	48.6%	6,633,244	4,780,301	72.1%		
Interest Expense	(61,264,334)	(68, 367, 494)		7,103,160	-10.4%	(63,267,584)	2,003,250	-3.2%		
Total Non-Operating Revenue (Expenses)	(50,587,800)	(60,684,572)		10,096,773	-16.6%	(56,508,513)	5,920,714	-10.5%		
Contributions	210,578.26	-		210,578	0.0%	51,895	(158,684)	305.8%		
Change in Net Position Before Swaps	55,784,833	32,450,293		23,334,540	71.9%	39,945,546	(15,839,286)	39.7%		
Change in Fair Value of Swaps	4,420,434	-		4,420,434	0.0%	6,335,750	1,915,316	-30.2%		
Change in Net Position After Swaps	\$ 60,205,267	\$ 32,450,293	\$	27,754,974	85.5%	\$ 46,281,297	\$ (13,923,970)	30.1%		

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Statement of Cash Flows

Louisville and Jefferson County Metropolitan Sewe	er District								
Statement of Cash Flows For the Month Ended, February 28, 2023									
	FY 2023	FY 2022							
Control Flores Commercial Autobio	YTD	YTD							
Cash Flows from Operating Activities	\$ 259.483.356	\$ 241,007,337							
Cash received from customers Cash paid to suppliers	\$ 259,483,356 (51,383,328)	\$ 241,007,337 (53,719,519)							
Cash paid to suppliers Cash paid to employees	(39,371,995)	(37,186,053)							
Net Cash Provided by Operating Activities	168,728,033	150,101,765							
Cash Flows from Capital and Related Financing Activities									
Proceeds from issuance of revenue bonds	-	248,821,124							
Proceeds from issuance of bond anticipation note	229,468,019	232,924,231							
Proceeds from issuance of commercial paper	260,000,000	325,000,000							
Proceeds from issuance of notes	-								
Proceeds from issuance of other subordinated debt	=	2,695,235							
Payments for retirement of revenue bonds	-	(3,756,272							
Payments for retirement of bond anticipation note	(226,340,000)	(226,340,000)							
Payments for retirement of commercial paper	(210,000,000)	(335,000,000							
Payments for retirement of notes		-							
Payments for retirement of other subordinated debt	(1,674,548)	(1,406,049)							
Payments for interest expense	(56, 174, 582)	(55,395,664)							
Payments for interest on swaps	(3,160,887)	(6,709,169							
Build America bond interest subsidy	7,324,100	6,896,138							
Proceeds from capital grants	÷								
Proceeds from sale of capital assets	(737,011)	125,827							
Payments for capital assets	(135,511,529)	(130,240,507)							
Proceeds from assessments	629,200	867,995							
Net Cash Provided (Used) by Capital and Related Financing	(136,177,238)	58,482,889							
Cash Flows from Investing Activities									
Purchase of investments	(74,740,357)	(107,170,920)							
Maturity of investments	80,881,756	36,293,794							
Investment income	9,214,320	1,292,201							
Net Cash Provided (Used) by Investing Activities	15,355,718	(69,584,925							
Net Increase (Decrease) in Cash and Cash Equivalents	47,906,513	138,999,729							
Cash and Cash Equivalents, Beginning of Year	71,854,355	101,985,796							
Cash and Cash Equivalents, End of Year	\$ 119,760,868	\$ 240,985,525							
Reconciliation of Operating Income to Net Cash provided by Operating Activities									
Income from operations	\$ 106,162,054	\$ 96,402,165							
Adjustments to reconcile operating income to net cash provided by operating activities									
Depreciation and amortization	72,800,398	66,591,557							
Accounts receivable	(2,939,678)	(1,274,044)							
Inventories	(356,832)	(177,513							
Prepaid expense	(2,310,300)	1,016,364							
Accounts payable	(2,821,513)	(10,528,207							
Customer deposits	70,128	(345,731							
Accrued liabilities	(1,876,224)	(1,582,826							
Pension liability	-	-							
OPEB liability	-								
Net Cash Provided by Operating Activities	\$ 168,728,033	\$ 150,101,765							
Non-Cash Capital Financing and Investing Activities									
Contribution of plant, lines and other facilities by developers and property owners	\$ -	\$ -							
Construction costs in accounts payable	11,314,565	14,802,445							
Change in fair value of investments	(1,116,358)	1,729,539							
Decrease in interest rate swap deferred revenue	(331,300)	(331,300							
Change in fair value - swap agreements	(4,420,434)	(63,357,550							
Bonds issued for refunding of debt	-	246,555,000							

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Actual vs. Budget Operating and Maintenance Expenses

Louisv		ounty Metropol I Maintenance E ed, February 28	Expenses	ct			
	YTD Actual	YTD Budget	YTD Variance	% YTD Variance	YTD Prior Year	YTD Variance	% YTD Variance
Salaries & Wages							
51120 - Regular Salaries & Wages 51130 - Overtime	\$ 29,948,581 1,850,975	\$ 39,126,663 1,496,931	\$ (9,178,082) 354.044	-23.5% 23.7%	\$ 28,389,580 1,549,567	\$1,559,001 301.408	5.59 19.59
51135 - Special Event Compensation	102,720	242,315	(139,595)	-57.6%	116,070	(13,350)	-11.5%
51140 - Wages pd for vacation, holidays & other	5,858,191	0	5,858,191	0.0%	5,700,886	157,305	2.8%
51145 - Incentive Pay - Performance, ERT, Sugg	6,942	0	6,942	0.0%	4,755	2,187	46.0%
51147 - Service & Safety Incentive Awards Total Salaries & Wages	12,275 37,779,684	19,045 40,884,955	(6,770) (3,105,270)	-35.5% - 7.6 %	12,975 35,773,833	(700) 2,005,851	-5.4% 5.6 %
Labor & Related Overhead							
51210 - Short-Term Disability	199,152	0	199,152	0.0%	243,279	(44,127)	-18.19
51220 - Workers' Compensation Insurance 51225 - Workers' Compensation Claims	59,092 276,815	216,672 782,533	(157,580) (505,718)	-72.7% -64.6%	178,992 419,371	(119,899) (142,556)	-67.0% -34.0%
51230 - Long-Term Disability	(21,033)	33,600	(54,633)	-162.6%	23,039	(44,072)	-191.39
51240 - Group Life - AD&D Insurance	80,324	26,400	53,924	204.3%	(15,060)	95,384	-633.49
51250 - Tuition Assistance	(6,472)	43,332 9,336	(49,804)	-114.9%	33,104	(39,576)	-119.69
51260 - Empl Assistance & Wellness Program 51300 - Payroll Taxes	4,070 2,677,100	2,948,585	(5,266) (271,486)	-56.4% -9.2%	6,983 2,378,257	(2,913) 298,843	-41.79 12.69
51400 - Unemployment Insurance	6,800	22,405	(15,605)	-69.6%	(35,776)	42,576	-119.0%
51500 - Med Ins: MSD's port. of prem for grp	4,846,515	5,050,104	(203,589)	-4.0%	4,749,634	96,881	2.0%
51600 - Retirement Contributions Total Labor & Related Overhead	9,552,327 17,674,689	9,948,881 19,081,849	(396,554) (1,407,160)	-4.0% - 7.4%	9,380,966 17,362,788	171,361 311,901	1.8%
Utilities							
53310 - Electric	9,028,636	8,943,880	84,756	0.9%	8,196,589	832,047	10.2%
53320 - Natural Gas	1,039,037	679,122	359,915	53.0% 41.4%	526,706 802,625	512,331	97.3%
53330 - Water 53340 - Telephone	1,360,712 193,005	962,343 208,667	398,369 (15,661)	41.4% -7.5%	802,625 170,523	558,088 22,483	69.5% 13.2%
53345 - Data Communications	772,922	912,000	(139,078)	-15.2%	752,933	(139,078)	2.7%
Total Utilities	12,394,312	11,706,012	688,300	5.9%	10,449,375	1,785,870	18.6%
Materials & Supplies 53100 - Tires & Tire Service Expense	200,536	222,854	(22,318)	-10.0%	0	200,536	0.0%
53140 - Materials & Supplies	5,249,520	5,440,501	(190,981)	-3.5%	4,688,003	561,517	12.0%
53160 - Landfill Cost of fill dirt	180,333	252,000	(71,667)	-28.4%	218,632	(38,299)	-17.5%
Total Materials & Supplies	5,630,389	5,915,355	(284,966)	-4.8%	4,906,636	723,753	14.8%
Contractual Services 51700 - Uniforms	158.947	192.793	(33,846)	-17.6%	135.658	23,289	17.2%
52110 - Billing & Collection	4,645,463	4,560,948	84,515	1.9%	4,175,230	470,233	11.3%
52130 - Custodial & Watchmen	548,153	564,236	(16,082)	-2.9%	460,791	87,362	19.0%
52140 - Professional Services	1,647,679	2,815,685	(1,168,006)	-41.5%	1,714,302	(66,623)	-3.9%
52145 - Legal	297,682	847,094	(549,412)	-64.9% -5.7%	301,281	(3,599)	-1.2%
52155 - Banking Services 52160 - Maintenance & Repairs	32,900 2,992,613	34,900 3,638,770	(2,000) (646,157)	-17.8%	33,595 2,941,065	(695) 51,548	-2.1% 1.8%
52170 - Sludge & Grit Disposal	2,143,632	1,991,182	152,450	7.7%	4,539,142	(2,395,510)	-52.8%
52180 - Temporary Services	51,196	154,050	(102,854)	-66.8%	122,692	(71,495)	-58.3%
52195 - Other Contractual Services Total Contractual Services	8,257,552 20,775,818	8,816,158 23,615,816	(558,606) (2,839,998)	-6.3% -12.0%	8,979,283 23,403,040	(721,731) (2,627,221)	-8.0% - 11.2 %
Bad Debt							
54200 - Bad Debts	2,569,608	2,356,864	212,744	9.0%	2,685,888	(116,280)	-4.3%
54210 - Bad Debt - Assessments Total Bad Debt	200,000 2,769,608	2,356,864	200,000 412,744	0.0% 17.5%	400,000 3,085,888	(200,000) (316,280)	-50.0% - 10.2 %
Chemicals							
53205 - Peracetic Acid 53210 - Chlorine	0	133,333	(133,333)	0.0%	0	0	0.0%
53210 - Chlorine 53215 - Sodium Hypochlorite	1,322,424	6,300 1,502,737	(6,300) (180,313)	-12.0%	552,632	769,792	139.3%
53220 - Polymer	1,714,560	2,601,125	(886,565)	-34.1%	1,908,311	(193,751)	-10.2%
53225 - Sodium Aluminate	132,728	287,488	(154,760)	-53.8%	149,660	(16,932)	-11.3%
53230 - Liquid Oxygen	166,328	219,011	(52,683) (14,731)	-24.1% -24.9%	118,101	48,227	40.8%
53235 - Liquid Nitrogen 53240 - Other Chemicals	44,325 14,520	59,056 35,404	(20,884)	-24.9%	1,384 67,523	42,941 (53,003)	3102.7% -78.5%
53250 - Dechlorination	245,082	498,515	(253,433)	-50.8%	383,853	(138,771)	-36.2%
53275 - Defoamer	20,021	26,477	(6,456)	-24.4%	0	20,021	0.0%
53280 - Bioxide	901,802	800,000	101,802	12.7%	863,709 0	38,093 0	4.4%
53285 - Sodium Hydroxide Total Chemicals	4,561,790	6,169,946	(500) (1,608,156)	0.0% - 26.1%	4,045,173	516,618	0.0% 12.8%
Fuel							
53120 - Gasoline 53130 - Diesel Fuel	483,875 664,542	558,000 909,839	(74,125) (245,296)	-13.3% -27.0%	396,726 527,036	87,148 137,506	22.0% 26.1%
Total Fuel	1,148,417	1,467,839	(319,422)	-21.8%	923,762	224,655	24.3%
Insurance Premiums & Claims		_					
54110 - General Liability Insurance	2,793,433	2,461,512	331,921 122,119	13.5%	2,379,929 1,368,194	413,504	17.4%
54130 - Property Insurance 54140 - General Liability Claims	1,474,071 467,120	1,351,952 371,500	122,119 95,620	9.0% 25.7%	1,368,194 497,386	105,877 (30,266)	7.7% -6.1%
Total Insurance Premiums & Claims	4,734,624	4,184,964	549,660	13.1%	4,245,509	489,115	11.5%
Other Operating Expense							
53410 - Equipment Rental	192,478	130,217	62,260	47.8%	147,054	45,424	30.9%
53420 - Space Rent 53430 - Leased Parking	20,000	20,000 53,027	1 627	0.0%	20,000	44.604	0.0%
53430 - Leased Parking 54250 - Contributions	54,654 213,880	53,027 266,833	1,627 (52,953)	3.1% -19.8%	10,050 224,716	44,604 (10,836)	443.8% -4.8%
54300 - Fines, Penalties & Damages	213,880	200,833	(32,933)	0.0%	19,794	(19,794)	0.0%
54400 - Advertising	23,748	97,501	(73,753)	-75.6%	21,644	2,104	9.79
54500 - Travel & Meetings	161,832	309,520	(147,689)	-47.7%	49,565	112,266	226.5%
54550 - Training 54600 - Dues, Fees and Subscriptions	145,132 468,576	349,402 334,678	(204,270) 133,898	-58.5% 40.0%	110,625 346,321	34,507 122,255	31.2% 35.3%
54700 - Board Members	4,925	9,600	(4,675)	-48.7%	6,200	(1,275)	-20.6%
55555 - Over/under payments	1,866	0	1,866	0.0%	1,028	838	81.5%
Total Other Operating Expense	1,287,090	1,570,779	(283,689)	-18.1%	956,997	330,093	34.5%
		116,954,379	(8,197,957)		105,153,000	3,444,355	

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SUPPLEMENTAL FINANCIAL REPORTING

Revenue by Customer Class

	Number of Customers		Revenue by C	ustomer Class	Budget By Co	Budget By Customer Class		
	Feb-2023	Feb-2022	Feb-2023 Feb-2022		Feb-2023	Feb-2022		
Wastewater								
Residential	235,867	234,182	14,221,226	11,329,196	12,311,388	12,724,113		
Commercial	21,951	21,817	6,625,481	5,252,227	5,461,977	5,399,566		
Industrial	394	398	2,059,178	1,721,760	1,860,429	2,129,549		
Sub-Total	258,212	256,397	22,905,885	18,303,183	19,633,794	20,253,229		
Drainage								
Residential	209,719	208,899	3,067,062	2,513,657	2,664,576	2,847,295		
Commercial	14,010	14,045	4,429,033	3,300,736	4,289,141	3,905,859		
Industrial	278	272	524,585	430,482	456,328	449,473		
Sub-Total	224,007	223,216	8,020,680	6,244,875	7,410,045	7,202,627		
Grand Total			\$ 30,926,566	\$ 24,548,058	\$ 27,043,839	\$ 27,455,856		

Wastewater Revenue by County

	Number of Customers		Revenue by C	ustomer Class	Budget by Customer Class		
	Feb-2023	Feb-2022	Feb-2023	Feb-2022	Feb-2023	Feb-2022	
Jefferson County							
Residential	224,404	224,042	13,628,169	10,798,237	11,642,149	11,990,418	
Commercial	21,518	21,469	6,491,091	5,116,853	5,332,254	5,320,966	
Industrial	392	396	2,057,006	1,719,779	1,857,983	2,129,459	
Sub-Total	246,314	245,907	22,176,265	17,634,869	18,832,386	19,440,844	
Bullitt County							
Residential	4,567	3,785	288,684	216,484	243,862	231,695	
Commercial	162	115	92,955	93,858	79,930	26,000	
Industrial	1	1	2,172	1,981	2,356	-	
Sub-Total	4,730	3,901	383,811	312,323	326,148	257,695	
Oldham County							
Residential	6,896	6,355	304,373	314,475	425,377	502,000	
Commercial	271	233	41,436	41,515	49,793	52,600	
Industrial	1	1	-	-	90	90	
Sub-Total	7,168	6,589	345,809	355,991	475,260	554,690	
Grand Total			\$ 22,905,885	\$ 18,303,183	\$ 19,633,794	\$ 20,253,229	

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Headcount

The approved fiscal year 2023 operating budget fully funded 665 staffed positions, provided full funding for 40 vacant positions and provided partial funding for 92 vacant positions. There were 2 vacant positions that were not funded at all in the budget which brought the total Budget Approved positions to 797.

The Currently Authorized column includes any positions that have been added or moved since the budget was adopted.

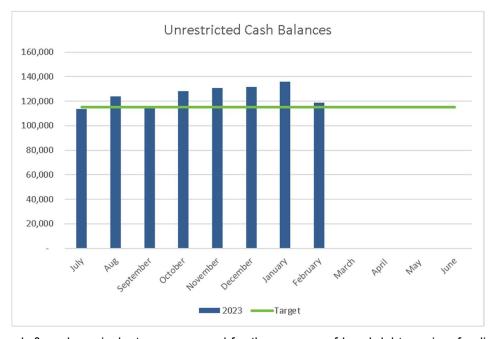
The chart below shows staffing level by division as of February 28, 2023.

FY23 Headcount by Division								
	Budget	Current						
<u> </u>	Approved	Authorized	Filled					
Administration								
Community Benefits & Partnerships	5	8	5					
Customer Relations	22	21	17					
Executive Offices	3	2	2					
Government & Public Affairs	6	6	5					
Innovation	3	4	3					
Internal Audit	4	4	3					
Records and Information Governance	9	9	8					
Corporate	1	1	1					
Engineering	101	99	84					
Facilities, Safety & Security	30	35	28					
Finance	19	19	17					
Human Resources	21	21	19					
Information Technology	32	32	28					
Legal	12	10	8					
Operations	502	501	420					
Supply Chain & Economic Inclusion	27	26	23					
Total Authorized Positions	797	798	671					
*Excludes temporary & seasonal staff								

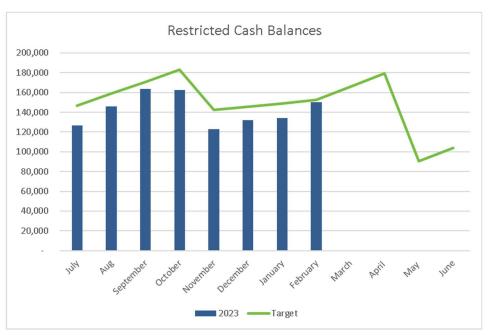
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Cash Balances

Unrestricted cash & cash equivalents generated from service fees and our operating income are used to pay for operating expenses. Unrestricted cash balance is a measure of financial health and supports the underlying credit rating. Low cash balances indicate poor flexibility and inability to manage contingencies.



Restricted cash & cash equivalents are reserved for the purpose of bond debt service, funding of capital construction, cost of issuance, and debt service reserves. MSD supplements its restricted debt service reserve cash and investments with a \$75 million bond surety policy to meet its required level of annual debt service reserve funding.



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Current Investment Model

MSD's Investment Policy requires distribution of a monthly investment report with an analysis of the status of the portfolio.

Series	Revenue Fund	Debt Service Fund	Debt Service Reserve Fund	Senior Subordinated Debt Fund	Construction Fund	Renewal and Replacement Fund	Total	Construction
008A	5.	12	961,027	-	8		961,027	Senior Fund Renewal and Subordinated 0% Replacement
009A	-5	15	4,354,067		-	15	4,354,067	Debt Service Debt Fund Fund
009В	50	-	13,576,478	2.5		-	13,576,478	Reserve Fund 0%
009C	-	3,294,431	13,197,852	-	~	-	16,492,283	31%
010A	÷0	5,286,448	17,478,475		*		22,764,922	
013A	26	1,216,799	27,607,953	640	•	140	28,824,752	
013B	28	2,536,988	THE RESERVE	12	2		2,536,988	
013C	28	96,319	98,371	120	8	120	194,689	
014A	_	919,634	7.7/51.7	-	_	-	919,634	
015A		2,241,176	152,586	-			2,393,763	
0158	73	2,966,967	132,300	350		350	2,966,967	
016A	54	1,968,861	5.	870		870	1,968,861	
016B	7/ 24	1,817,411				1.0	1,817,411	
016C	50	1,817,411		120		190	10,159,983	
			1 477 215	5 - 2		7 - 2		
017A	-0.0	6,322,622	1,477,215				7,799,837	
017B	-	1,127,826	-	-	-	-	1,127,826	Debt Service_
018A	35	639,256		- 1		- 1	639,256	Fund 26%
019A	25	7,185,106	Same and S	3.5		17	7,185,106	2078
020A	28	2,375,527	2,163,965	673		673	4,539,493	
020C	**	1,497,166			*	-	1,497,166	
021A	*0	11,022,880	-				11,022,880	Corporate
022A	20	3,206,636	2		633,925	-	3,840,561	Commercial
021 BAN	23	-	8	-	2	-		Paper US Treasury 10% Cash
022 BAN	20	3,251,887	-	-		-	3,251,887	US Treasury 10% Cash Agency 15%
enewal & Replacement	38				9	3,030,915	3,030,915	21%_
2018 A-1 & A-2		15	5	1.0	8,499	17	8,499	
ash	40,348,695	17		675		(7)	40,348,695	
ertificate of Deposit	100,000	-					100,000	
Ioney Market Funds	234,739				*		234,739	
Iuni-Bonds	10,	840	2	640	•	640	· · · ·	
S Treasury Bills	27,699,473	-	€	-	2		27,699,473	
S Treasury Agency	17,839,227	120	8	12		120	17,839,227	
orporate Commercial Paper	22,986,552		-	-	-	-	22,986,552	
	\$ 109,208,686	\$ 69,133,922	\$81,067,989	\$ -	\$ 642,423	\$ 3,030,915	\$ 263,083,935	
		Seekle Market Market Market	I de la company de la comp	Senior	California de la Califo	Renewal and		
Asset Description	Revenue Fund	Debt Service	Debt Service	Subordinated	Construction	Replacement	Total	
- AND SET BERNATTH SERVICE		Fund	Reserve Fund	Debt Fund	Fund	Fund		US Treasury Bills
ash	40,348,695	4.50		57.5		Massione	40,348,695	12%
ertificate of Deposit	100,000	-	-	-	~	-	100,000	
oney Market Funds	234,739	69,133,922	3,489,834		642,423	11,133	73,512,052	128_00_2_100
luni-Bonds	X. 20	- 10 TO 100	37,167,157	640		N 640	37,167,157	Muni-Bonds 14%
S Treasury Bills	27,699,473	2	Telde Telefold Table	2	9	3,019,781	30,719,254	9857
S Treasury Agency	17,839,227	100	37,934,201	100		-,,, 0-	55,773,428	
orporate Commercial Paper	22,986,552	_	2,476,796		_	_	25,463,348	
porace committee crair raper	\$ 109,208,686	\$ 69,133,922	\$81,067,989	-	\$ 642,423	\$ 3,030,915	\$ 263,083,935	

Monthly Investment Activity

Following is a list of indivdual investment transactions executed over the last month. Unless otherwise noted, redemptions represent maturities of investments.

Account	Transaction Type	Category	Amount
2022A Construction	Redemption	Standard Chartered BK Commercial Paper	(10,000,000.00)

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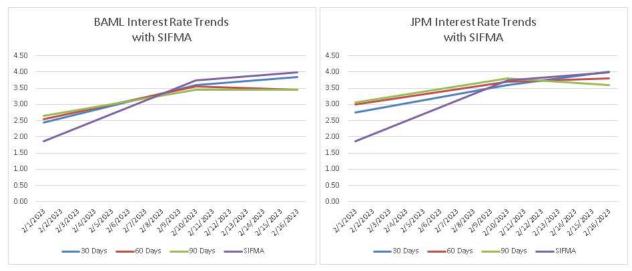
Commercial Paper Program Summary

MSD operates a \$500 million Commercial Paper (CP) program to provide interim financing for its capital program. Liquidity support is provided by JP Morgan Chase and Bank of America, NA. Merrill Lynch, Pierce, Fenner & Smith Inc and JP Morgan Securities are dealers for the program. In February, we had three notes mature that were replaced with new notes with an average rate of 3.25% and average terms of 88 days. In February, we did not issue any new notes. In March, we have three notes maturing totaling \$30M.

The CP Construction Fund balance as of February 28th, was \$8,498.29. Outstanding CP notes are currently split 50% with JP Morgan and 50% with Bank of America.

Currently Outs	itanumg									
				Term	Maturity	Dealer		New Issuance	SIFMA	Spread over
Issuance Date	CUSIP	Principal	Rate	(# of days)	Date	(JPM/BAML)	Interest Cost	or Roll?	Index	(under) SIFMA
12/2/2022	54658QDK7	10,000,000	2.50%	91	3/3/2023	JPM	62,328.77	Roll	1.85%	0.65%
12/5/2022	54658QDL5	10,000,000	2.50%	93	3/8/2023	JPM	63,698.63	Roll	1.85%	0.65%
12/7/2022	54658QDM3	10,000,000	2.72%	98	3/15/2023	JPM	73,030.14	New	1.85%	0.87%
1/9/2023	54658QDN1	10,000,000	3.05%	93	4/12/2023	JPM	77,712.33	Roll	3.13%	-0.08%
1/12/2023	54658NDN8	10,000,000	2.62%	104	4/26/2023	BAML	74,652.05	Roll	2.50%	0.12%
1/19/2023	54658NDP3	20,000,000	2.37%	99	4/28/2023	BAML	128,564.38	Roll	1.86%	0.51%
2/2/2023	54658QDP6	10,000,000	2.80%	90	5/3/2023	JPM	69,041.10	Roll	1.87%	0.93%
2/13/2023	54658NDQ1	10,000,000	3.50%	84	5/8/2023	BAML	80,547.95	Roll	3.74%	-0.24%
2/16/2023	54658NDR9	10,000,000	3.45%	89	5/16/2023	BAML	84,123.29	Roll	3.98%	-0.53%

The Securities Industry and Financial Markets Association (SIFMA) publishes a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations (VRDOs) with certain characteristics. The Index is calculated and published by Bloomberg and is overseen by SIFMA's Municipal Swap Index Committee. The SIFMA is a short-term interest rate index that MSD uses to gauge the interest rates we receive on our CP placements.



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SECTION 3: CAPITAL PROGRAM PERFORMANCE

The Capital Program Performance Section is prepared to provide MSD's Executive Director and the MSD Board with a high-level understanding of progress made with implementing the FY23 CIP, including Consent Decree and other mandated projects, regulatory compliance commitments, and high priority asset management needs. The following information is presented in this report:

- Comparison of forecast and expenditures to the approved FY23 budget performance target (approved budget minus Management Reserve)
- Discussion of change management activities occurring during the reporting period
- Major project highlights and program challenges
- Forecast of upcoming procurement activities

FY23 CAPITAL BUDGET BASIS

The FY23 CIP budget of \$195.4M for Jefferson, Bullitt and Oldham County projects was approved by the Board in May 2022. The approved budget was based upon \$190.4M in total expenditures forecasted at that time for the projects anticipated to be active during the Fiscal Year July 1, 2022, through June 30, 2023. In addition, \$5M was set aside in Management Reserve to fund emergencies and other unanticipated priorities for a total approved budget ceiling of \$195.4M.

Many projects span across multiple fiscal years so the annual budget may not represent the total estimate for the project. Construction spending is dependent upon the Contractor's actual progress with the work contracted. Complex construction projects are difficult to predict exactly how spending will occur each month. Variations in starting project activities, equipment deliveries, weather delays, subsurface conditions, etc. can affect the speed of monthly and annual spending. For large capital projects MSD reviews the Contractor's anticipated rate of spending and compares it with MSD's cashflow forecast on a monthly basis.

CIP Priorities for Operations

The FY23 CIP was developed in coordination with MSD's Engineering, Finance, and Operations divisions. The intent of the CIP is to enhance, support, and streamline utility operations by 1) providing capital funding for new equipment; 2) replacing aging infrastructure; 3) reducing sewer overflows; and 4) improving reliability of all assets operated and maintained by MSD divisions. The 5-year and FY23 CIP were developed to mitigate risks related to asset failure and regulatory compliance. MSD priorities funding to achieve the greatest risk mitigation possible with the available budget.

The top CIP priorities from an operational perspective were included in the baseline FY23 CIP.

- Morris Forman WQTC Biosolids: The aging biosolids processes at the Morris Forman WQTC have presented significant operational challenges. The FY23 CIP includes multiple projects related to biosolids process improvements including design and site work for the new state-of-the-art biosolids processing facility, and an update to the District-Wide Biosolids Management Master Plan.
- Morris Forman WQTC Sedimentation Basin Rehabilitation: The peak flow capacity of the Morris Forman WQTC is currently limited by the capacity of the sedimentation basins. Construction began in FY22 for rehabilitating all four basins. Per an Agreed Order with the State, this work must be completed no later than December 31, 2026. The project is in construction.
- <u>Large Diameter Sewer Rehabilitation Program</u>: Every year, MSD experiences multiple sewer failures that are primarily due to aging infrastructure. As such, MSD is continuing a 5-year program to proactively rehabilitate the highest risk large diameter sewers. Construction for the I-64 & Grinstead rehabilitation project will be complete in FY23. Rehab work on a portion of the Prospect Sewer is in construction. Additional sewers are in this program that is included in the amended Consent Decree.

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• Flood Pump Station Reliability Improvements: The Ohio River Flood Protection System protects 240,000 people and \$60B of property within the levee area. MSD is working in partnership with the United States Army Corps of Engineers (USACE) to complete \$168M of asset improvements with the intent of improving the overall reliability of the system. The USACE continues to coordinate funding for the reliability program. Work is progressing for the Paddy's Run FPS Capacity Improvement Project. MSD staff is currently in discussion with the USACE regarding new requirements.

FY23 CIP OVERALL PERFORMANCE

MSD assigned funds to a Management Reserve to fund emergencies and unanticipated priorities. Use of the Management Reserve requires approval by the CIP Management Team. The baseline FY23 budget included \$5M for Management Reserve. MSD is reporting cash flow performance excluding this unutilized reserve position. The following new budget performance nomenclature is introduced into this monthly report:

- <u>Budget Ceiling</u>: This represents the total annual capital spend approved with the FY23 CIP of \$195.4M inclusive of all projects, appropriations, and Management Reserve funds.
- **Performance Budget Target**: This represents the Budget Ceiling minus the current level of Management Reserve (as captured in G23029). This target, which will change as Management Reserve is utilized, better measures the progress of the working slate of projects. As of February 28, 2023, the Performance Budget Target is \$191.8M.

FY23 capital expenditures for the Wastewater, Stormwater, and Support Services Programs totaled \$90.6M through February 2022. This spend represents approximately 46.36% of the \$195.4M FY23 capital budget and 47.2% of the budget performance target.

The forecasted spend for FY23 has been lowered to \$175M due primarily to easement issues impacting design progression and construction starts, as well as equipment delivery constraining construction activities.

Capital Budget Performance Summary

Note: The forecast will continue to evolve throughout the FY based on changes to the program including project schedules and estimates.

Financial Category	Value	Comments
FY 2023 Budget Ceiling	\$195.4M	Approved by MSD Board
FY 2023 Performance Budget Target	\$191.8M	Budget Ceiling minus Mgmt. Reserve
FY 2023 Spending Projection	\$175.0M	Forecasted Spend
FY 2023 Actuals	\$90.6M	47,2% of Budget Ceiling

A breakdown of the monthly spend forecast as compared to actual spending is presented in the table below. Capital expense reflects total capital invoices received against purchase orders in the month.

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FY23 Evolving Spend Forecast and Actuals

FY23	Monthly Baseline Performance Target	Monthly Actuals
July 2022		\$ 1.4M
August 2022	\$12.1M	\$ 6.9M
September 2022	\$12.6M	\$ 6.7M
October 2022	\$13.4M	\$14.8M
November 2022	\$15.2M	\$12.1M
December 2022	\$16.4M	\$17.5M
January 2023	\$16.7M	\$17.3M
February 2023	\$16.5M	\$13.9M
March 2023	\$18.7M	
April 2023	\$18.6M	
May 2023	\$21.5M	
June 2023	\$28.7M	
FY23 Performance Budget Target	\$ 190.4M	\$ 90.6M

Note: The FY23 baseline forecast excludes \$5M in Management Reserve. The forecast and actuals exclude FEMA grant projects. Most invoices paid in July are for work performed in June, and therefore were charged against the FY22 budget. The June 2023 estimate includes the FY23 accruals.

Challenges to CIP Execution

Efforts made by staff to meet project schedules and budgets have been impacted by the following:

Construction bids

- Reduced the number of respondents or responsive bidders for some procurements.
- Due to unprecedented construction escalation rates, bids are often coming in much higher than anticipated. Some non-regulatory projects will be subject to internal discussion and may be put on hold.

Supply-Chain Project Impacts

- Nationwide electronic chip shortage impacting the delivery of new vehicles.
- Supply shortage of material impacting delivery of equipment.
- Shortage of external workforce.

Third-Party Coordination Impacts

- Obtaining easements and stakeholder approval have resulted in delays for some projects.
- Contractor learning curve to understand and properly comply with Supplier Diversity requirements is requiring some projects to be re-bid.

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MONTHLY PROJECT ACTIVITIES

MSD's working definitions for each project's schedule activity are as follows:

- <u>Initiation/ Procurement Activity</u>: The time when a project in the approved CIP is waiting for planning to be completed; a design Project Manager (PM) assignment; or a consulting Professional Services Agreement Notice-to-Proceed (NTP).
- **Design Activity**: The time from when a project is transitioned from planning to preliminary design through final design, through bidding, until the NTP is issued for construction.
- <u>Construction Activity</u>: The time from when a project is issued a NTP through achievement of Substantial Completion of the contracted scope of work.
- Studies: Specific projects for assessments, evaluations, studies, and plan development.

A summary of the status of projects active during the reporting period is provided in the table below. Summary of Active Non-Appropriation Projects During Reporting Month

Current Project Activity	# of Projects	Lifetime Actuals	FY23 Budget	FY23 Actuals
Initiation & Procurement	32	\$164,927	\$5,798,276	\$164,927
Design	75	\$35,755,616	\$50,833,950	\$16,948,070
Construction	52	\$117,580,735	\$68,652,795	\$32,813,644
Studies	13	\$5,823,380	\$4,408,583	\$1,789,081
TOTAL	172	\$159,324,658	\$129,693,604	\$51,715,722

Does not include projects in Closeout phase.

Emergency Contracts to Repair Infrastructure Damage

When emergencies become larger than internal resources can handle and/or present immediate public safety dangers, emergency contracts are executed. MSD issues emergency contracts under the Chief Engineer's and Executive Director's authority. In general, emergencies are any situation that disrupt service to customers and community related to wastewater treatment, stormwater management and flood protection. Often emergencies are due to the condition and age of MSD's assets, while some are due to heavy rain events and saturated soils undermining of pipe infrastructure and drainage runoff has washing away and/or eroding drainage systems. For the past decade MSD had to defer spending for asset management in order to comply with construction of new assets mandated in the Consent Decree to mitigate unauthorized discharges.

Active emergency projects are included in the table below. The amount presented typically reflects the construction contract only. The Budget ID assigned to each project is listed. Projects that are routine in nature and repaired relatively quickly are performed under the annual appropriation FY23 Renewal and Replacement - Budget ID G23001. Projects more complex or requiring more time for completion are assigned a new budget ID.

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Year-to-Date Active Emergency Contract Work

Emergency	Funding Source	Date Began	Emergency Certificate Amount (\$)	Contractor
Mellwood Closure	F21096	1/3/2023	\$65,000	Pace Contracting, LLC
3024 Hilltop CtAlbrecht PS FM Repair	G23001	1/23/2023	\$50,000	Oliver Excavating
SGC Gates Replacement - Design	H22022	7/1/2021	\$2,000,000	AECOM
SGC Gates Replacement - Construction	H22022	4/1/2022	\$2,000,000	Pace Contracting, LLC
5th St FPS MCC's	F15012	12/22/2022	\$335,000	AES, Inc
MFWQTC MEB East & West Freight Elevators	G23001	TBD	\$500,000	Oracle Elevators
1101 E Main St	G23001	TBD	\$10,000,00	MAC Construction
13 Quality Place (OC)	W23173	1/13/2023	\$150,000	MAC Construction
15th Street Sewer Repair	A22183	3/7/2022	\$500,000	Temple and Temple
2218 Dorothy Ave	G23001	8/23/2022	\$50,000	TRC, LLC (WBE)
29th and Liberty Sewer Repair	G23001	1/31/2023	\$250,000	Basham Construction and Rental
715 E Gray Street Sewer Repair	G23001	2/15/2023	\$75,000	TRC, LLC (WBE)
7309 Ethan Allen Way	G23001	12/2/2022	\$75,000	TRC, LLC (WBE)
BC ProLogis Treatment Plant	Y23098	10/10/2022	\$75,000	MAC Construction
Liberty Street Sewer Replacement	E23172	2/13/2023	\$5,000,000	Flynn Brothers
MFWQTC LG Dryer Replacements	D20285	1/1/2020	\$69,668,264	Judy Construction
FFWQTC UV Gates Replacement	G23001	TBD	\$150,000	Dugan & Meyers

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Projects Removed from Cashflow

Projects that have been removed from the cashflow are shown in the following table.

Projects Removed from Cashflow Forecast

Budget ID and Project Name	FY23 Budget (\$)	Lifetime Actuals	Reason
H23042 - Padmount Transformer for Battery C	\$850,000		The scope of this project is being completed as part of the MFWQTC High Voltage Maintenance project.
H09163 Little Cedar Creek Interceptor	\$575,110		Project is being eliminated from MSD's IOAP via Minor Mod letter.
H23015 Carslaw Court PS Elimination	\$212,500		The scope of this project will be completed at the Gunpowder Pump Station ILS project.
H19018 FY23 CMOM Program Management	\$127,500		The scope of this project will be completed under FY23 Modeling
N23024 Communications Message Boards	\$42,500		Project postponed to FY24
H23017 CCWQTC Preliminary Treatment Improvements	\$558,623		Project postponed due to new headworks decision

Major Project Highlights

A major project is defined as one with an FY23 budget larger than \$5M. The following tables list major projects in design and construction.

Major Design/Build Projects

Budget ID & Project Name	Design Finish	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
D22100 Morris Forman Water Quality Treatment Plant Biosolids Facility	9/19/2023	\$340.5M	\$8.5M	\$13.3M	\$10.7M	60% Design has been completed.
F18515 Paddy's Run FPS Capacity Improvements	9/21/2023	\$250.1M	\$7.7M	\$5.4M	\$7.2M	USACE coordination has begun and will potentially delay this project

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Major CIP Projects Under Construction

Budget ID & Project Name	Anticipated Substantial Completion	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
D17042 MFWQTC Sedimentation Basin	4/3/2024	\$38.7M	\$15.0M	\$12.4M	\$9.7M	Delays in fabrication and delivery of electrical equipment are expected to extend the anticipated substantial completion date by six months to October 3, 2024.
H21019 Rudd Ave Sewer Infrastructure Rehabilitation	1/23/2023	\$14.4M	\$8.2M	\$9.3M	\$5.2M	Construction is ongoing.
D20285 MFWQTC LG Dryer Replacements	1/29/2023	\$76.9M	\$7.0M	\$70.9M	\$6.9M	Additional scope will be completed as equipment delivers

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CIP MANAGEMENT TEAM MEETING HIGHLIGHTS

The CIP Management Team met on February 28, 2023. The following presents a summary of the meeting discussions,

Meeting Participants

Voting Members	Technical Support Staff		
Tony Parrott (present)	John Loechle (present)	Erin Wagoner (present)	
Brian Bingham (present)	Stephanie Laughlin (present)	Kevin Gibson (present)	
Angela Akridge (present)	Wolffie Miller (present)	Yajaira Morphonios (present)	
Brad Good (present)	Dan French (present)	Dolly Smith (present)	
David Johnson (present)	Tony Marconi (present)	Marc Thomas (present)	
	Latoya English (present)	Daymond Talley (present)	
	Wes Sydnor (present)	Troy Smith (present)	
	Greg Powell (present)	Mike Griffith (present)	
	Kellie Watson (present)	Sharma Young (present)	
		Leisha Pica (present)	

Regulatory Discussion

The following discussion was had regarding regulatory topics.

<u>Consent Decree.</u> Ms. Pica noted progress continues to be made as scheduled for the Consent Decree projects.

- The group celebrated the final completion of the 25 Long Term Control Plan (LTCP) projects. This 10-year effort represented a significant achievement for MSD.
- MSD is still waiting to hear from EPA regarding the four SSDP minor modifications submitted in November.
- MSD submitted two project certification letters recently:
 - o I-64 and Grinstead CSO Interceptor (completed November, mailed December)
 - Morris Forman Dryer Replacement (completed December, mailed January)
- MSD submitted updated SORP Documentation to KDOW in February
- MSD submitted mid-year Consent Decree Report in February

Agreed Order Projects.

- Ms. Pica stated substantial progress has been made with the projects included in the Corrective Action Plan for the Morris Forman WQTC. Of the 26 CAP projects, only two remain.
- Construction is on-going for the Oldham County agreed order interceptor project.

Other Regulatory Topics.

 Mr. Johnson stated MSD's Asset Management Plan has been approved and MSD will receive notification of the approved plan in writing from EPA.

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FY23 CIP Progress and Discussion

The following topics were discussed related to the FY23 CIP.

February 2023 Forecast. Ms. Pica noted MSD has spent \$76M for FY23. Actuals for January totaled \$17.3M. She noted monthly actuals have remained at a steady pace for the past four months.

Staff continue to have monthly meetings to review budget and spend. Supply chain impacts still result in project delays.

EAC Increase. Ms. Morphonios presented the following for consideration by the CIP Mgmt Team:

- FY23 Construction Inspection APPROVED
- I&I Rehab and PSC Program Support APPROVED
- Stormwater Pilot Modeling APPROVED

New Projects. Ms. Morphonios presented the following for consideration by the CIP Mgmt Team:

- Campground Park Excess Cost APPROVED
- Shirly Avenue Property Purchase APPROVED

New Emergencies. The list of active emergencies was presented by Ms. Pica. She noted three new emergencies occurred in February including the following projects.

- Liberty Street sewer replacement
- 715 E Gray Street Sewer Repair
- Olive Street Sewer Repair

Design Starts Forecast.

Ms. Pica noted three new projects starting design in February.

Procurement Bidding Forecast.

M. Pica noted three projects opened bids in February.

<u>Upcoming Construction Starts Forecast.</u>

Ms. Pica noted two projects are scheduled to start construction in February: Modesto Pump Station Elimination and MFWQTC MED HVAC replacement. She said the Monticello Pump Station Elimination Project is scheduled to begin in March.

Supply Chain Economy Forecast Update

M. Pica presented an overview of the 2022 key commodities escalation for each quarter of 2022. She noted the following:

- Escalation rates for key commodities required for MSD's CIP are decreasing. Significant and negative escalations were observed during Q4 2022.
- Gas and diesel prices continue to trend downward. February 2023 gas was \$3.30 per gallon as compared to \$4.93 during the price peak in June 2022. Similarly, diesel is \$4.41 per gallon as compared to \$5.75 in June 2022. These prices result in lower construction and delivery costs for MSD's projects.

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- Forecasted Escalation Trends
 - Commodity continuing to escalate over the next five years: concrete, paints & coatings, copper, electrical cable, pumps
 - Commodities returning to pre-COVID pricing in 2024: steel bar, structural steel, steel pipe, stainless steel
 - Commodities high in 2023 then steady starting in 2024: aluminum, HVAC, compressors
 - Commodities lowering but to remain at levels higher than pre-COVID: gypsum wall, plastic pipe, valves, electrical gear
- Forecasted Labor Trends
 - o Labor continuing to escalate construction, general contractor, concrete contractor
 - Labor to peak then slower escalation: electrical contractor
- Equipment Lead Times
 - o Remain 15-20% higher than 2019 values
 - Switchgear worse lead time at 55-80 weeks after factory receives the order
 - o Centrifuges running 66-74 weeks (not available within a year of order)
- Supply Chain Logistics
 - Air cargo travel is improving from China to Europe due to China lifting its zero covid ban.
 Factories are ramping up. Air cargo is slowing from India as capacity grows and demand remains light.
 - US import and export markets have improved with a positive outlook for Q1/Q2 2023.
 - Ocean cargo: US Port congestion resolved. This time in 2022 more than 100 container ships were stuck waiting off ports. Today there are almost no ships waiting in Pacific waters and increasingly few off the East and Gulf coasts.
 - o US Domestic Freight: fuel surcharges remain major drivers of cost.

CHANGE MANAGEMENT ACTIVITIES

Notice of Advisement (NOA)

NOAs are intended to document any change to a project scope, schedule, and budget. A standardized electronic form has been created by the MSD Project Controls Team.

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The table below lists the NOA's processed during the reporting period. In general, requests by staff tend to fall into the following categories:

- New Projects Added to the CIP: New projects that were not known at the time the CIP was under development and subsequently approved by MSD's Board. These projects are vetted by staff before funding is requested. Projects are only added to the CIP if funding is available from the CIP Management Reserve.
- **Projects with Schedule Adjustments**: As projects progress through a standard lifecycle, schedules are adjusted. The schedule dates and project duration are used in the cashflow forecast tool. As such, it is important to track and monitor schedule adjustments to the CIP projects.
- **Projects with EAC Adjustments**: As projects advance, the estimate at completion (EAC) is adjusted. Routine adjustments are made at the 30%, 60%, 90%, and Bid Award milestones.
- **Projects Deferred to a Future Year**: Some projects are deferred based upon new information, updated planning status, or to free up funds for other more pressing capital needs.

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Notice of Advisement Log for Reporting Month

ID	Project Name	Advisement Category	FY Impact	Status
534	CMF Compost Facility	New Project, Budget	\$100,000	Approved
535	FY23 Management Reserve	Budget	\$3,000,000	Approved
536	California Maple St Trap CB Rehab	New Project, Budget	\$480,000	Approved
537	CMOM Infrastructure Rehabilitation	EAC increase		Approved
538	Various Projects	New projects, Budget	\$2,757,938	Approved
539	Ohio River Service Area Lift Station	Schedule, Budget	(\$699,035)	Approved
540	Middletown Station Pump Station Elimination	EAC decrease		Approved
541	Mobile Communications Replacement - Phase II	New Project, Budget	\$475,000	Approved
542	FY23 Modeling Support	EAC decrease, Budget	(\$202,500)	Approved
543	FY23 CIP Task Assistance	EAC decrease, Budget	(\$200,000)	Approved
544	FY23 NMC RTC	EAC decrease, Budget	(\$125,000)	Approved
545	Admiral Road PS Improvements	EAC decrease, Budget	(\$183,000)	Approved
546	BCSD Multi-Plant Disinfection	EAC increase, Budget	\$115,000	Approved
547	Water Reuse Study	EAC increase, Budget	\$50,000	Approved
548	FY23 CMOM Collection System PS RR	EAC Increase, Budget	\$122,000	Approved
549	Beargrass Creek FPS Masonry Repairs	New Project, Budget	\$200,000	Approved
550	FY23 CMOM Gravity Line & Inspection	EAC decrease		Approved
551	FY23 CMOM SCAP AAM & FOG	EAC decrease		Approved
552	Stormwater Pilot Modeling	EAC increase, Budget	\$153,430	Approved
553	FY23 IPS Support	EAC increase		Approved
554	FY23 Flood Structures RR	EAC decrease		Approved
555	I&I Rehabilitation and PSC Program Support	EAC increase, Budget	\$100,000	Approved
556	Lake Forest PS Station Eliminations	Schedule, Budget	(\$800,000)	Approved
557	CSO 140 Outfall Reconstruction	New Project, Budget	\$130,000	Approved

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ID	Project Name	Advisement Category	FY Impact	Status
558	Floodprone Property Acquisition 6501 Shirley	New Project, Budget	\$400,000	Approved
559	Sabert PS Force Main repair - Emergency	New Project, Budget	\$50,000	Approved
560	FPS Equipment R&R	EAC decrease, Budget	(\$1,037,117)	Approved
561	Liberty St Sewer Repair Emergency Contract	EAC increase, Budget	\$500,000	Approved

PROCUREMENT ACTIVITIES

The table below presents the projects currently advertised. The bid dates represent anticipated times and are subject to change via addendum.

Upcoming Construction Bid Openings

Budget ID	Project Name	Bid Opening
D22098	CCWQTC Re-rating to 9_0 MGD	3/2/2023
C22173	High Hazard Dam Flood Level Sensors	3/7/2023
H22032	DRGWQTC Sodium Bisulfite Building Improvements	3/9/2023
F19126	4 th St. Hoist Replacement	3/14/2023
H23038	MF Network Encasement	3/16/2023
C23083	City of Graymoore - Devendale DIP	3/21/2023
D18132	DRGWQTC WWPS WWSB HVAC & Roof and U3 & U4 Transformer Elimination (Rebid)	3/24/2023

Bid Openings

Bids opened during the reporting month are shown below.

Budget ID	Project Name	Bid Opening	Engineer's Estimate	Awarded Bid
C23137	Lynnview Catch Basin Replacement Project	2/2/2023	\$245,000	\$330,538
C23138	10701 West Manslick Road DIP	2/9/2023	\$105,000	\$93,608
C23145	7617 Hornbeck Farm Road DIP	2/23/2023	\$70,000	\$52,537

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Construction - Notice to Proceeds (NTP) Issued
The Notice-to-Proceeds issued for projects are listed below.

Budget ID	Project Name	NTP Date
E21062	Modesto Pump Station Elimination	2/14/2023

END OF REPORT