Monthly Executive Report

Financial & Capital Program Updates
As of November 30, 2022



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
LOJIC 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

MONTHLY EXECUTIVE REPORT

November 30, 2022

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

MSD Metropolitan Sewer District NMC Nine Minimum Controls

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

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 November, 2022, with respect to Fiscal Year 2023 (FY23) program health and regulatory compliance.

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 throughout this report.

Summary of FY23 Capital Program Performance To-date

Key Programs and Initiatives	Status as of November 30, 2022
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	Three (3) emergency projects started in November 2022. The emergencies include a VCP repair at 2 nd and Muhammad Ali, FM repair at Eastview Fisherville Rd., and a brick sewer repair at Wennzel and Liberty. The estimated costs are \$375k.
Cashflow Performance*	Budget Performance Target is \$191.8M as of November, 2022.
Change Management Notice of Advisements (NOAs)	Four (4)) NOAs were processed this month in the following advisement categories: Four (4) new projects, 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

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 November 2022
- Customer Statistics
- Employee Headcount
- Cash Balances
- Investment Summary
- Commercial Paper Program Summary

NOVEMBER FINANCIAL SUMMARY

Financial Highlights for the month of November 2022

- Total operating revenues were \$2.0 million unfavorable to budget
- Service and administrative expenses were \$1.0 million favorable to budget

Results of Operations for the month of November 2022

Total operating revenues were \$2.0 million unfavorable to budget and \$2.0 million less than November 2021. Wastewater service charges were \$1.4 million unfavorable to budget and \$843 thousand less than November 2021. Drainage service charges were \$483 thousand unfavorable to budget and \$473 thousand less than November 2021. Other operating revenues were \$143 thousand unfavorable to budget and \$721 thousand less than November 2021. Daily revenues from November 29th (\$1.2 million of wastewater service charges and \$313 thousand of drainage service charges were posted to December 1st as the result of a systems issue. This offsets \$1.5 million of the \$2,0 million November operating revenue variance. Year to date, total operating revenues were \$3.6 million favorable to budget (wastewater service charges \$2.4 million, drainage service charges \$180 thousand and other operating income \$1.0 million). Wastewater service charges are being driven by the commercial customer class which account for \$2.1 million of the \$3.6 million budget variance, primarily due to higher billed volume charges.

Service and administrative expenses were \$1.0 million favorable to budget and \$1.4 million more than November 2021. Year to date, service and administrative expenses were \$6.6 million favorable to budget. Salaries and Labor Related Overhead account for \$3.3 million of the savings to budget. Contract Services and Chemcials make up the remainder of the budget savings.

Depreciation and amortization expenses were \$402 thousand unfavorable to budget and \$883 thousand more than November 2021. Year to date, depreciation and amortization expenses were \$1.9 million unfavorable to budget.

Investment income was \$380 thousand favorable to budget and \$182 thousand less than November 2021. Year to date, investment income was \$510 thousand favorable to budget.

Interest expense was \$913 thousand favorable to budget and \$539 thousand less than November 2021. Year to date, interest expense was \$4.3 million favorable to budget. Interest expense savings are being driven by lower swap payments.

Statement of Cash Flows

Cash and cash equivalents decreased \$36.5 million in November. Net cash provided by operating activities increased \$21.5 million. Net cash used by capital-related financing activities was \$59.0 million of which \$46 million was used for the payment of interest expense and \$13.7 million was used to fund construction in process. Net cash received from investing activities was \$920 thousand.

FINANCIAL STATEMENTS - FY23

Comparative Statement of Net Position

Louisville & Jefferson	County Metropoli	tan Sewer District		
Monthly Compara	itive Statement of	Net Position		
For Month E	nded, November	30, 2022		
	YTD	YTD		
	Nov-2022	Nov-2021	Variance	Percer
Current Assets				
Unrestricted Cash & Cash Equivalents	\$130,646,110	\$109,220,607	\$21,425,503	19.62
Sewer & Drainage Receivable	27,716,454	29,556,349	(1,839,896)	-6.23
Assessment Warrants Receivable	166,966	196,235	(29,269)	-14.92
Miscellaneous Receivables	(547,115)	(2,135,245)	1,588,130	-74.38
Inventories	5,639,696	5,287,121	352,575	6.67
Prepaid Expenses	6,505,457	6,448,436	57,021	0.88
Restricted Funds	122,854,877	103,549,896	19,304,981	18.64
Accrued Interest Receivable	340,553	231,208	109,345	47.29
Total Current Assets	293,322,999	252,354,608	40,968,391	16.23
Non-Current Assets				
Utility Plant in Service	4,734,395,548	4,303,956,938	430,438,610	10.00
Accumulated Depreciation	(1,613,515,160)	(1,506,594,825)	(106,920,335)	7.10
Construction in Progress	474,806,635	674,691,464	(199,884,829)	-29.63
Net Fixed Assets	3,595,687,023	3,472,053,577	123,633,446	3.56
Non-Current Receivables	21,777,603	25,535,547	(3,757,945)	-14.72
Total Assets	3,910,787,625	3,749,943,732	160,843,893	4.29
Total Deferred Outflow of Resources	70,523,200	83,395,371	(12,872,171)	-15.44
Total Assets & Deferred Outflow of Resources	3,981,310,824	3,833,339,103	147,971,721	3.86
Current Liabilities				
Miscellaneous Accounts Payable	7,787,353	9,171,075	(1,383,722)	-15.09
Accounts Payable - Construction	8,109,235	2,470,564	5,638,671	228.23
Contract Retainage	5,411,081	11,737,218	(6,326,137)	-53.90
Accrued Interest Payable	5,504,018	4,998,874	505,144	10.11
Current Maturities of Bonds Payable	52,880,000	51,230,000	1,650,000	3.22
Current Maturities of Subordinate Debt	3,080,801	2,375,180	705,621	29.71
Deposits Payable	2,068,919	2,747,393	(678,473)	-24.70
Accrued Salaries & Wages	2,521,284	2,140,138	381,146	17.81
Accrued Workers' Comp Insurance	1,767,997	2,652,990	(884,993)	-33.36
Employee Comp Absences Payable	4,101,263	3,970,778	130,484	3.29
Total Current Liabilities	93,231,950	93,494,210	(262,259)	-0.28
Non-Current Liabilities				
Long-Term Senior Debt Payable	2,228,405,000	2,056,535,000	171,870,000	8.36
Long-Term Subordinate Debt Payable	365,020,628	464,924,813	(99,904,185)	-21.49
Other Long-Term Liability	290,325,404	323,722,956	(33,397,552)	-10.32
Total Non-Current Liabilities	2,883,751,032	2,845,182,768	38,568,263	1.36
Total Liabilities	2,976,982,982	2,938,676,978	38,306,004	1.30
Total Deferred Inflow of Resources	54,367,399	10,080,515	44,286,884	439.33
Total Liabilities & Deferred Inflow of Resources	3,031,350,381	2,948,757,493	82,592,888	2.80
Net Position	949,960,443	884,581,610	65,378,833	7.39
Total Liabilities, Deferred Inflow of Resources and Net Position	3,981,310,824	3,833,339,103	147,971,722	3.86

Statement of Revenues, Expenses & Change in Net Position

Louisville & Jefferson County Metropolitan Sewer District											
Monthly Statement of Revenues, Expenses, and Changes in Net Position For Month Ended, November 30, 2022											
	YTD	ntn Ended, Nov YTD	YTD	2 % YTD	YTD	YTD	% YTD				
	Actual	Budget	Variance	Variance	Prior Year	Variance	Variance				
Wastewater Charges											
Residential	\$ 69,529,834	\$ 69,821,096	\$ (291,262)	-0.4%	\$ 66,164,467	\$ 3,365,367	5.1%				
Commercial	41,067,006	38,965,780	2,101,226	5.4%	38,166,759	2,900,247	7.6%				
Industrial	10,459,968	10,083,595	376,373	3.7%	9,663,733	796,235	8.2%				
Other Wastewater	5,215,754	3,927,920	1,287,833	32.8%	4,163,910	1,051,844	25.3%				
Free Wastewater Charges	(3,342,721)	(2,294,715)	(1,048,006)	45.7%	(2,736,447)	(606,274)	22.2%				
Total Wastewater Charges	122,929,841	120,503,676	2,426,165	2.0%	115,422,421	7,507,419	6.5%				
Drainage											
Residential	13,855,935	13,677,922	178,013	1.3%	12,903,218	952,717	7.4%				
Commercial	21,287,888	21,403,885	(115,997)	-0.5%	20,355,043	932,845	4.6%				
Industrial	2,518,288	2,469,972	48,316	2.0%	2,330,074	188,214	8.1%				
Other Stormwater	1,692,987	1,550,333	142,654	9.2%	1,499,895	193,093	12.9%				
Free Stormwater Charges	(1,119,269)	(1,046,683)	(72,586)	6.9%	(1,066,777)	(52,493)	4.9%				
Total Drainage Charges	38,235,829	38,055,429	180,400	0.5%	36,021,453	2,214,376	6.1%				
Total Service Charges	161,165,670	158,559,105	2,606,565	1.6%	151,443,875	9,721,795	6.4%				
Other Operating Income	2,892,298	1,881,412	1,010,886	53.7%	3,479,079	(586,782)	-16.9%				
Total Operating Revenue	164,057,968	160,440,517	3,617,451	2.3%	154,922,954	9,135,014	5.9%				
Operating Expenses											
Salaries & Wages	23,228,918	25,707,125	(2,478,207)	-9.6%	21,722,072	1,506,847	6.9%				
Labor Related Overhead	11,085,850	11,964,193	(878,343)	-7.3%	10,682,354	403,496	3.8%				
Utilities	7,032,020	6,871,195	160,825	2.3%	5,897,791	1,134,229	19.2%				
Materials & Supplies	3,651,349	3,697,440	(46,092)	-1.2%	2,811,654	839,695	29.9%				
Contractual Services	13,003,380	15,347,154	(2,343,775)	-15.3%	14,123,776	(1,120,396)	-7.9%				
Chemicals	2,633,115	3,856,216	(1,223,102)	-31.7%	2,497,574	135,540	5.4%				
Fuel	767,138	916,337	(149,199)		573,143	193,995	33.8%				
Insurance Premiums & Claims	3,019,821	2,615,603	404,219	15.5%	2,468,358	551,463	22.3%				
Bad Debt	1,719,608	1,473,043	246,565	16.7%	1,928,680	(209,072)	-10.8%				
Other Operating Expense	805,446	1,117,273	(311,827)	-27.9%	596,685	208,761	35.0%				
Mapping/Insurance Recovery	-	1,111,210	(011,021)	0.0%	-	0	0.0%				
Capitalized Overhead	(15,780,882)	(17,655,739)	1,874,856	-10.6%	(15,716,655)						
Capital Expenses (over)/under applied	(13,700,002)	(17,055,759)	1,074,000	-10.076	(13,710,033)	(04,221)	0.47				
Net Service and Administrative Costs	51,165,762	55,909,841	(4,744,079)	-8.5%	47,585,431	3,580,331	7.5%				
Depreciation	45,138,324	43,108,335	2,029,989	4.7%	40,910,288	4,228,036	10.3%				
Amortization	652,927	736,258	(83,330)	-11.3%	464,337	188,590	40.6%				
Total Depreciation/Amortization	45,791,251	43,844,593	1,946,658	4.4%	41,374,625	4,416,626	10.7%				
Total Operating Expenses	96,957,013	99,754,433	(2,797,420)	-2.8%	88,960,056	7,996,957	9.0%				
Net Operating Income	67,100,955	60,686,084	6,414,871	10.6%	65,962,898	1,138,056	1.7%				
Non-Operating Revenue (Expenses)											
Gain/Loss Disposal of Assets	(737,011)	500	(737 511)	-147502.2%	74,983	(811 994)	-1082.9%				
Investment Income	5,311,997	4,802,000	509,997	10.6%	4,912,140	399,857	8.1%				
Interest Expense	(37,580,257)	(41,894,912)		-10.3%	(37,662,617)		-0.2%				
Total Non-Operating Revenue (Expenses)	(33,005,271)	(37,092,412)	4,087,142	-11.0%	(32,675,493)	(329,777)	1.0%				
Contributions	1,464,943.82	_	1,464,944	0.0%	51,895	(1,413,049)	2722.9%				
Change in Net Position Before Swaps	35,560,628	23,593,671	11,966,956	50.7%	33,339,299	(2,221,328)					
Change in Fair Value of Swaps	(8,632,006)	-	(8,632,006)	0.0%	(3,476,692)	5,155,314	148.3%				
Change in Net Position After Swaps	\$ 26,928,622	\$ 23,593,671	\$ 3,334,950	14.1%		\$ 2,933,985	-9.8%				

Statement of Cash Flows

Louisville and Jefferson County Metropolitan Sewe	er District										
Statement of Cash Flows For the Month Ended, November 30, 2022											
	FY 2023	FY 2022									
Cash Flows from Operating Activities	YTD	YTD									
Cash received from customers	\$ 163.099.235	\$ 152,018,139									
Cash paid to suppliers	(33,919,264)	(35,504,776									
Cash paid to employees	(25,397,670)	(23,739,31)									
Net Cash Provided by Operating Activities	103,782,301	92,774,05									
Cash Flows from Capital and Related Financing Activities											
Proceeds from issuance of revenue bonds		-									
Proceeds from issuance of bond anticipation note	229,468,019	232,924,23									
Proceeds from issuance of commercial paper	150,000,000	205,000,00									
Proceeds from issuance of notes	-	-									
Proceeds from issuance of other subordinated debt											
Payments for retirement of revenue bonds	-	(3,577,29									
Payments for retirement of bond anticipation note	(226,340,000)	(226, 340, 00									
Payments for retirement of commercial paper	(110,000,000)	(160,000,00									
Payments for retirement of notes		-									
Payments for retirement of other subordinated debt	(1,013,621)	(783,90									
Payments for interest expense	(54,271,649)	(54, 309, 02									
Payments for interest on swaps	(2,340,907)	(4,291,09)									
Build America bond interest subsidy	4,577,563	4,329,75									
Proceeds from capital grants	-	-									
Proceeds from sale of capital assets	(737,011)	74,98									
Payments for capital assets	(73,229,472)	(85,412,38									
Proceeds from assessments	394,399	514,88									
Net Cash Provided (Used) by Capital and Related Financing	(83,492,679)	(91,869,850									
Cash Flows from Investing Activities											
Purchase of investments	(64,659,318)	(56,044,153									
Maturity of investments	47,689,928	20,003,79									
Investment income	851,338	1,019,56									
Net Cash Provided (Used) by Investing Activities	(16,118,052)	(35,020,79									
Net Increase (Decrease) in Cash and Cash Equivalents	4,171,570	(34, 116, 59									
Cash and Cash Equivalents, Beginning of Year	71,854,355	101,985,796									
Cash and Cash Equivalents, End of Year	\$ 76,025,925	\$ 67,869,199									
Reconciliation of Operating Income to Net Cash provided by Operating Activities											
Income from operations	\$ 67,100,955	\$ 65,962,89									
Adjustments to reconcile operating income to net cash provided by operating activities											
Depreciation and amortization	45,791,251	41,374,62									
Accounts receivable	(1,107,549)	(2,895,59									
Inventories	(377,415)	(201,03									
Prepaid expense	(3,556,386)	(292,90									
Accounts payable	(2,019,868)	(9, 174, 34									
Customer deposits	148,817	(9,22									
Accrued liabilities	(2,197,504)	(1,990,36									
Pension liability											
OPEB liability	-	-									
let Cash Provided by Operating Activities	\$ 103,782,301	\$ 92,774,05									
Non-Cash Capital Financing and Investing Activities											
Contribution of plant, lines and other facilities by developers and property owners	\$ -	\$ -									
Construction costs in accounts payable	13,520,315	32,029,06									
Change in fair value of investments	823,385	(39,10									
Decrease in interest rate swap deferred revenue	(207,063)	(207,06									
Change in fair value - swap agreements	(8,632,006)	3,476,69									
	,	246,555,00									

Actual vs. Budget Operating and Maintenance Expenses

Louisvi		ounty Metropol I Maintenance E Ied, November	xpenses	ct			
	YTD Actual	YTD Budget	YTD Variance	% YTD Variance	YTD Prior Year	YTD Variance	% YTE
alaries & Wages		buuget	variance	Variance	riioi reai	variance	v ai iaii
51120 - Regular Salaries & Wages	\$ 18,946,634		\$ (5,673,532)		\$ 18,588,946	\$ 357,688	1.
51130 - Overtime 51135 - Special Event Compensation	1,020,438 55,560	923,172 151,885	97,266 (96,325)	10.5% -63.4%	807,822 54,510	212,616 1,050	26. 1.
51140 - Wages pd for vacation, holidays & other	3,185,904	0	3,185,904	0.0%	2,253,691	932,213	41.
51145 - Incentive Pay - Performance, ERT, Sugg	12,334	0	12,334	0.0%	9,328	3,006	32.
51147 - Service & Safety Incentive Awards Total Salaries & Wages	8,050 23,228,918	11,903 25,707,125	(3,853) (2,478,207)	-32.4% -9.6%	7,775 21,722,072	275 1,506,847	3 6
abor & Related Overhead							
51210 - Short-Term Disability	109,685	0	109,685	0.0%	172,445	(62,759)	-36
51220 - Workers' Compensation Insurance 51225 - Workers' Compensation Claims	47,192 343,713	135,420 492,403	(88,228) (148,690)	-65.2% -30.2%	101,825 259,241	(54,632) 84,473	-53 32
51230 - Long-Term Disability	(5,229)	21,000	(26,229)	-124.9%	(19,721)	14,492	-73
51240 - Group Life - AD&D Insurance	15,075	16,500	(1,425)	-8.6%	25,559	(10,484)	-41
51250 - Tuition Assistance	(14,888)	30,831	(45,719)	-148.3%	21,777	(36,665)	-168
51260 - Empl Assistance & Wellness Program 51300 - Payroll Taxes	1,226 1,633,771	5,835 1,832,455	(4,609) (198,684)	-79.0% -10.8%	0 1,364,948	1,226 268,822	19
51400 - Unemployment Insurance	6,800	14,084	(7,284)	-51.7%	(35,776)	42,576	-119
51500 - Med Ins: MSD's port. of prem for grp	3,026,812	3,156,315	(129,503)	-4.1%	2,966,136	60,676	- 2
51600 - Retirement Contributions	5,921,691	6,259,350	(337,658)	-5.4%	5,825,921	95,771	
Total Labor & Related Overhead	11,085,850	11,964,193	(878,343)	-7.3%	10,682,354	403,496	3
illities 53310 - Electric	5,164,076	5,153,675	10,401	0.2%	4,608,487	555,589	12
53320 - Natural Gas	467,609	413,139	54,470	13.2%	141,791	325,818	229
53330 - Water	821,516	603,964	217,551	36.0%	590,635	230,881	39
53340 - Telephone	129,662	130,417	(755)	-0.6%	104,329	25,333	2
53345 - Data Communications	449,158	570,000	(120,842)	-21.2%	452,550	(120,842)	-1
Total Utilities	7,032,020	6,871,195	160,825	2.3%	5,897,791	1,016,779	1
sterials & Supplies 53100 - Tires & Tire Service Expense	124.257	139,404	(15,147)	-10.9%	0	124,257	
53140 - Materials & Supplies	3,302,993	3,400,536	(97,544)	-2.9%	2,704,188	598,804	22
53150 - Inventory Adjustments	105,051	0	105,051	0.0%	0	105,051	(
53160 - Landfill Cost of fill dirt	119,047	157,500	(38,453)	-24.4% -1.2%	107,465	11,582 839,695	29
Total Materials & Supplies	3,651,349	3,697,440	(46,092)	-1.2%	2,811,654	839,695	2
ntractual Services 51700 - Uniforms	101.638	126,965	(25,326)	-19.9%	74.454	27,184	36
52110 - Billing & Collection	2,851,235	2,804,835	46,400	1.7%	2,608,244	242,991	9
52130 - Custodial & Watchmen	315,518	353,585	(38,067)	-10.8%	240,650	74,868	3
52140 - Professional Services	806,254	1,808,452	(1,002,198)	-55.4%	902,309	(96,055)	-10
52145 - Legal 52155 - Banking Services	166,893 25,157	529,434 25,750	(362,541) (594)	-68.5% -2.3%	225,607 14,944	(58,714) 10,212	-26 68
52160 - Maintenance & Repairs	2,104,397	2,531,978	(427,582)	-16.9%	1,909,188	195,209	10
52170 - Sludge & Grit Disposal	1,096,091	1,244,489	(148,398)	-11.9%	2,431,813	(1,335,722)	-54
52180 - Temporary Services	35,768	109,767	(73,999)	-67.4%	84,382	(48,614)	-5
52195 - Other Contractual Services Total Contractual Services	5,500,430 13,003,380	5,811,900 15,347,154	(311,470) (2,343,775)	-5.4% - 15.3%	5,632,186 14,123,776	(131,756) (1,120,396)	-3
d Debt							
54200 - Bad Debts	1,594,608	1,473,043	121,565	8.3%	1,678,680	(84,072)	-9
54210 - Bad Debt - Assessments Total Bad Debt	125,000 1,719,608	1,473,043	125,000 246,565	0.0% 16.7%	250,000 1,928,680	(125,000) (209,072)	-50 -1 0
emicals							
53205 - Peracetic Acid	0	83,333	(83,333)	0.0%	0	0	
53210 - Chlorine	710.143	3,938	(3,938)	0.0%	0 339,941	0	10
53215 - Sodium Hypochlorite 53220 - Polymer	710,142 1,110,656	939,211 1,625,703	(229,069) (515,047)	-24.4% -31.7%	1,226,768	370,201 (116,112)	
53225 - Sodium Aluminate	68,488	179,680	(111,192)	-61.9%	74,462	(5,974)	
53230 - Liquid Oxygen	97,622	136,882	(39,259)	-28.7%	90,354	7,268	
53235 - Liquid Nitrogen	26,747	36,910	(10,163)	-27.5%	1,384	25,363	183
53240 - Other Chemicals 53250 - Dechlorination	5,010 139,040	22,128 311,572	(17,117) (172,531)	-77.4% -55.4%	31,902 151,754	(26,891) (12,714)	-8-
53275 - Defoamer	139,040	16,548	(16,548)	0.0%	131,/34	(12,714)	7
53280 - Bioxide	475,409	500,000	(24,591)	-4.9%	581,009	(105,601)	-1
53285 - Sodium Hydroxide Total Chemicals	2,633,115	313 3,856,216	(313) (1,223,102)	0.0% - 31.7%	0 2,497,574	0 135,540	
el	,,	.,,	. ,,2/	/4	,,	,0	
53120 - Gasoline	333,626	378,000	(44,374)	-11.7%	248,947	84,678	34
53130 - Diesel Fuel Total Fuel	433,512 767,138	538,337 916,337	(104,825) (149,199)	-19.5% - 16.3%	324,195 573,143	109,317 193,995	33 33
surance Premiums & Claims	,-30	,,	,/		,	,	,
surance Premiums & Claims 54110 - General Liability Insurance	1,745,896	1,538,445	207,451	13.5%	1,370,831	375,065	2
54130 - Property Insurance	921,454	844,970	76,484	9.1%	844,972	76,483	9
54140 - General Liability Claims Total Insurance Premiums & Claims	352,471 3,019,821	232,188 2,615,603	120,284 404,219	51.8% 15.5%	252,556 2,468,358	99,915 551,463	39 22
	-,,	,,-55	,	/	,,0		
her Operating Expense 53410 - Equipment Rental	143,023	85,811	57,212	66.7%	118,828	24,196	20
53420 - Space Rent	12,500	12,500	0	0.0%	12,500	0	(
53430 - Leased Parking	27,708	33,142	(5,434)	-16.4%	1,200	26,508	2209
54250 - Contributions 54300 - Fines, Penalties & Damages	165,069 0	209,583	(44,514) 0	-21.2% 0.0%	158,300 8,399	6,769 (8,399)	
24300 - Filles, Felialties & Damages	12,120	67,427	(55,307)	-82.0%	10,793	1,328	1
54400 - Advertising	118,692	214,410	(95,718)	-44.6%	28,857	89,835	31
54400 - Advertising 54500 - Travel & Meetings	118,692						6
54500 - Travel & Meetings 54550 - Training	76,138	249,287	(173,149)	-69.5%	45,148	30,990	
54500 - Travel & Meetings 54550 - Training 54600 - Dues, Fees and Subscriptions	76,138 243,649	239,112	4,536	1.9%	209,822	33,827	10
54500 - Travel & Meetings 54550 - Training 54600 - Dues, Fees and Subscriptions 54700 - Board Members	76,138 243,649 3,875	239,112 6,000	4,536 (2,125)	1.9% -35.4%	209,822 4,050	33,827 (175)	1
54500 - Travel & Meetings 54550 - Training 54600 - Dues, Fees and Subscriptions	76,138 243,649	239,112	4,536	1.9%	209,822	33,827	

SUPPLEMENTAL FINANCIAL REPORTING

Revenue by Customer Class

	Number of Customers		Revenue by C	ustomer Class	Budget By Cı	ustomer Class
	Nov-2022 Nov-2021		Nov-2022	Nov-2021	Nov-2022	Nov-2021
Wastewater						
Residential	235,592	230,312	12,701,449	13,105,402	13,467,468	11,619,495
Commercial	21,949	21,706	8,210,358	8,728,146	8,966,446	7,624,114
Industrial	394	392	1,893,625	1,826,072	1,909,865	2,061,203
Sub-Total	257,935	252,410	22,805,431	23,659,620	24,343,779	21,304,812
Drainage						
Residential	209,634	208,705	2,475,429	2,545,829	2,698,679	2,276,956
Commercial	14,010	14,053	3,998,201	4,387,327	4,242,756	3,896,498
Industrial	278	270	464,267	475,098	503,623	460,416
Sub-Total	223,922	223,028	6,937,897	7,408,254	7,445,058	6,633,869
Grand Total			\$ 29,743,328	\$ 31,067,873	\$ 31,788,837	\$ 27,938,682

^{*}November 2022 includes acquired Bullitt County Sanitation District customers.

Wastewater Revenue by County

	Number of (Customers	Revenue by C	ustomer Class	Budget by Cus	Budget by Customer Class			
	Nov-2022	Nov-2021	Nov-2022	Nov-2021	Nov-2022	Nov-2021			
1-11									
Jefferson County									
Residential	224,224	223,990	11,976,315	12,660,097	12,760,398	11,117,495			
Commercial	21,495	21,465	8,083,909	8,668,195	8,829,783	7,571,514			
Industrial	392	391	1,891,864	1,825,989	1,907,948	2,061,113			
Sub-Total	246,111	245,846	21,952,087	23,154,280	23,498,129	20,750,122			
Bullitt County									
Residential	4,537	0	208,620	-	221,693	-			
Commercial	163	0	73,358	-	86,870	-			
Industrial	1	0	1,671	-	1,827	-			
Sub-Total	4,701	0	283,649	-	310,390	-			
Oldham County									
Residential	6,831	6,322	516,514	445,305	485,377	502,000			
Commercial	291	241	53,091	59,951	49,793	52,600			
Industrial	1	1	90	83	90	90			
Sub-Total	7,123	6,564	569,695	505,339	535,260	554,690			
Grand Total			\$ 22,805,431	\$ 23,659,620	\$ 24,343,779	\$ 21,304,812			

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.

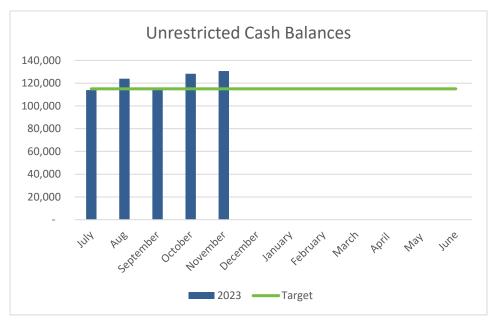
The Currently Authorized column includes any positions that have been added or moved since the budget was adopted.

The chart below shows staffing level by division as of November 30, 2022.

FY23 Headcount by Division										
	Budget	Current								
_	Approved	Authorized	Filled							
Administration										
Community Benefits & Partnerships	5	5	5							
Customer Relations	22	22	17							
Executive Offices	3	3	2							
Government & Public Affairs	6	6	5							
Innovation	3	3	3							
Internal Audit	4	4	3							
Records and Information Governance	9	9	8							
Corporate	1	1	1							
Engineering	101	97	85							
Facilities, Safety & Security	30	32	25							
Finance	19	19	16							
Human Resources	21	21	19							
Information Technology	32	32	27							
Legal	12	10	8							
Operations	502	497	412							
Supply Chain & Economic Inclusion	27	26	23							
Total Authorized Positions	797	787	659							
*Excludes temporary & seasonal staff										

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.



Current Investment Model

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

				Senior		Renewal and		1		
Series	Revenue Fund		Debt Service	Subordinated	Construction	Replacement	Total			
Series	nevenue runa	Fund	Reserve Fund	Debt Fund	Fund	Fund	10101			R
2008A			951,257	-		-	951,257			R
009A	_	-	4,318,819	_	_	_	4,318,819	Constru Senior Fur		
1009B	_	_	13,470,365	_	_	_	13,470,365	Subordinated 139		
009C	_	586,436	13,051,444	_	_	_	13,637,880	Debt Fund		
010A		106,959	17,401,452	_		_	17,508,411	0%		
013A		53,411	27,333,366				27,386,777			
013B	_	938,640	27,000,000	_	_	_	938,640			
013C		63,177	97,477				160,653			
014A	_	60,264	37,477	_	_	_	60,264	\		
015A		358,293	151,199				509,493			
015B	_	1,548,020	131,199	_	_	_	1,548,020			
016A	-	555,734		-						1
	-		-	-	-	-	555,734			/
016B	-	1,101,512	-	-	-	-	1,101,512			
016C	-	6,679,375	4 470 404	-	-	-	6,679,375			
017A	-	3,270,847	1,472,134	-	-	-	4,742,982	Debt Service Reserve Fund		
017B	-	489,187	-	-	-	-	489,187	32%		
018A	-	32,251	-	-	-	-	32,251			
019A	-	4,814,622		-	-	-	4,814,622			
020A	-	516,130	2,150,791	-	-	-	2,666,921			
020C	-	610,582	-	-	-	-	610,582			
021A	-	6,423,843	-	-	-	-	6,423,843			
022A	-	1,116,174	-	-	33,390,911	-	34,507,084	1	Corporate	
021 BAN	-	-	-	-	-	-	-		Commercial	
022 BAN	-	-	-	-	-	-	-	1	Paper 18%	
enewal & Replacement	-	-	-	-	-	3,007,640	3,007,640	1	\	_
P 2018 A-1 & A-2	-	-	-	-	6,587	-	6,587			
Cash	35,064,810	-	-	-	-	-	35,064,810	US Treasury		
Certificate of Deposit	100,000	-	-	-	-	-	100,000	Agency 19%		
Noney Market Funds	211,398	-	-	-	-	-	211,398	1370		
Nuni-Bonds	-	-	-	-	-	-	-			
IS Treasury Bills	27,412,097	-	-	-	-	-	27,412,097			
IS Treasury Agency	7,884,590	-	-	-	-	-	7,884,590			
orporate Commercial Paper	32,690,998	-	-	-	-	-	32,690,998			
	\$ 103,363,893	\$ 29,325,457	\$80,398,303	\$ -	\$ 33,397,497	\$ 3,007,640	\$ 249,492,790			
A 1 D 1 1		Debt Service	Debt Service	Senior	Construction	Renewal and				
Asset Description	Revenue Fund	Fund	Reserve Fund	Subordinated	Fund	Replacement	Total			
	05.054.5:-			Debt Fund		Fund	25.054.5:-		/	
Cash	35,064,810	-	-	-	-	-	35,064,810	U	S Treasury Bil	ls
Certificate of Deposit	100,000	-	-	-		-	100,000		20%	
Money Market Funds	211,398	29,325,457	995,123	-	3,575,904	11,046	34,118,928	i		
Muni-Bonds	-	-	37,201,000	-	-	-	37,201,000	1		
JS Treasury Bills	27,412,097	-		-	19,905,204	2,996,594	50,313,895			
JS Treasury Agency	7,884,590	-	39,757,476	-	-	-	47,642,066	l		
orporate Commercial Paper			2,444,704	-	9,916,390	-	45,052,092	l		
	\$ 103,363,893	\$ 29,325,457	\$80,398,303	\$ -	\$33,397,497	\$ 3,007,640	\$ 249,492,790	i		

Monthly Investment Activity

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

Account	Transaction Type	Category	Amount
2022 BAN Notes Project	Purchase	Federal Home Loans Bank	2,831,637.33
2013 Debt Reserve	Redemption	Federal Home Loans Bank	(22,194,215.78)
2013 Debt Reserve	Purchase	Federal Home Loans Bank	22,195,002.64
2013 Debt Reserve	Purchase	Federal Home Loans Bank	1,000,000.00
2013 Debt Reserve	Purchase	New York City Transitional Authority	1,168,308.00
2022A Construction Fund	Redemption	US Treasury Bond	(3,286,181.64)

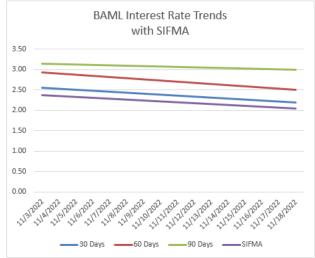
Commercial Paper Program Summary

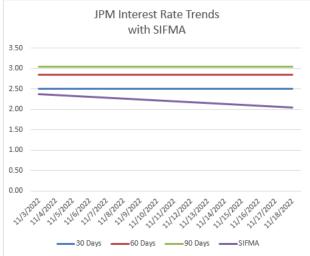
MSD operates a \$500 million Commercial Paper (CP) program to provide interim financing for its capital program. Liquidity support is provided by JP Morgan Chase and Bank of America, NA. Merrill Lynch, Pierce, Fenner & Smith Inc and JP Morgan Securities are dealers for the program. In November, we had two notes mature that were replaced with a new notes with an average rate of 2.70% and average terms of 89 days. We did not issue any new notes in November. In December, we have three \$10M notes maturing.

The CP Construction Fund balance as of November 30th, was \$6,586.13. Outstanding CP notes are currently split 44.4% with JP Morgan and 55.6% with Bank of America.

CP Issuanc	e Details									
Currently Outs	tanding									
				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
9/16/2022	54658QDF8	10,000,000	2.17%	80	12/5/2022	JPM	47,561.64	Roll	1.44%	0.73%
10/3/2022	54658QDG6	10,000,000	2.85%	60	12/2/2022	JPM	46,849.32	Roll	2.46%	0.39%
10/6/2022	54658NDH1	10,000,000	2.84%	70	12/15/2022	BAML	54,465.75	Roll	2.45%	0.39%
10/7/2022	54658QDH4	10,000,000	2.95%	94	1/9/2023	JPM	75,972.60	New	2.45%	0.50%
10/12/2022	54658NDJ7	10,000,000	3.05%	92	1/12/2023	BAML	76,876.71	Roll	2.45%	0.60%
10/21/2022	54658NDK4	20,000,000	3.05%	90	1/19/2023	BAML	150,410.96	Roll	2.37%	0.68%
11/4/2022	54658QDJ0	10,000,000	2.85%	90	2/2/2023	JPM	70,273.97	Roll	2.38%	0.47%
11/21/2022	54658NDL2	10,000,000	2.55%	87	2/16/2023	BAML	60,780.82	Roll	2.04%	0.51%
Currently	Outstanding:	\$ 90,000,000					\$ 583,192			

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.

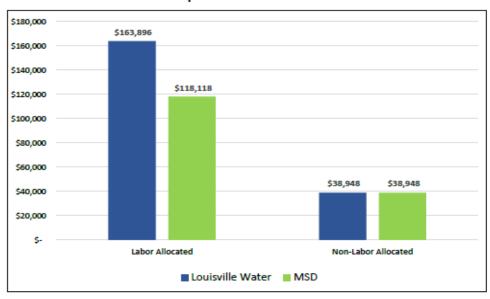




One Water Report



One Water Shared Service Expenses September 2022 YTD



Labor Costs Allocated to L	N	
MSD One Water Employees	A	mount
Fleet Services Director	s	62,275
Chief Innovation Officer		46,053
Fleet Services Administrator		34,542
Procurement Director		21,026
Total	\$	163,896
Non-Labor Costs Allocated to	LW	1
Shared Services	Α	mount
LAGIT Insurance	\$	11,782
Backup Data Line for Cust Svc		10,379
		7.750
One Water Partnership Story		7,250
One Water Partnership Story One Water Affordability Project		7,250
		•
One Water Affordability Project		7,008
One Water Affordability Project WEFTEC Conference & Expo		7,008 746
One Water Affordability Project WEFTEC Conference & Expo Greater Louisville Inc. Annual Meeting		7,008 746 725
One Water Affordability Project WEFTEC Conference & Expo Greater Louisville Inc. Annual Meeting US Water Alliance Conference		7,008 746 725 624

\$ 202,844

Labor Costs Allocated to M	SD		
LW One Water Employees		Amount	
Executive Director	\$ 80,62		
Vice President of Communications		21,804	
Customer Service Director		15,694	
Total	\$	118,118	
Non-Labor Costs Allocated to	MS	D	
Shared Services		Amount	
LAGIT Insurance	\$	11,78	
Backup Data Line for Cust Svc		10,379	
One Water Partnership Story		7,250	
		7,00	
One Water Affordability Project			
One Water Affordability Project WEFTEC Conference & Expo		746	
		-	
WEFTEC Conference & Expo		72	
WEFTEC Conference & Expo Greater Louisville Inc. Annual Meeting		72: 62:	
WEFTEC Conference & Expo Greater Louisville Inc. Annual Meeting US Water Alliance Conference		746 725 624 313 123	

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 County 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 advancement of 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. Prospect Sewer rehabilitation project is underway. All CCTV footage has been reviewed and point repairs have been identified. Point repairs are expected to be completed by January. CIPP liner has been ordered.

• 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 Canal Street Floodwall and the Paddy's Run FPS Capacity Improvement Project. MSD staff continue to coordinate with USACE regarding the Canal Street Floodwall project.

This information will be updated/adjusted in the event new priorities develop or risks change.

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 progress of the working slate of projects. As of November 30, 2022, the Performance Budget Target is \$191.8M.

FY23 capital expenditures for the Wastewater, Stormwater, and Support Services Programs totaled \$41.9M through November 2022. This spend represents approximately 21.5% of the \$195.4M FY23 capital budget and 21.9% of the budget performance target.

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	ng \$195.4M Approved by MSD Boar		
FY 2023 Performance Budget Target	\$191.8M	Budget Ceiling minus Mgmt. Reserve	
FY 2023 Actuals	\$41.9M	21.5% 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.

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	
January 2023	\$16.7M	
February 2023	\$16.5M	
March 2023	\$18.7M	
April 2023	\$18.6M	
May 2023	\$21.5M	
June 2023	\$28.7M	
FY23 Performance Budget Target	\$ 190.4M	\$ 41.9M

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 delivery 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.
- General impacts of COVID have delayed some projects.

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.

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	41	\$ 49,500	\$ 9,710,870	\$ -
Design	54	\$ 27,916,276	\$ 52,974,748	\$ 6,029,576
Construction	39	\$120,947,161	\$ 77,899,835	\$ 8,123,518
Studies	14	\$ 1,918,308	\$ 3,388,832	\$ 338,288
TOTAL	148	\$150,831,245	\$143,974,285	\$14,491,383

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.

Year-to-Date Active Emergency Contract Work

Emergency	Funding Source	Date Began	Contractor	Emergency Certificate Amount (\$)
MFWQTC LG Dryer Replacements	D20285	1/1/2020	Judy Construction	\$ 69,668,264
SGC Gates Replacement - Design	H22022	7/1/2021	AECOM	\$ 2,000,000
CMF Remediation	G22001	11/11/2021	Pace Contracting, LLC	\$ 150,000
Bar Screen Repair at the SWPS	G22001	1/28/2022	Brownfields Environmental Consulting	\$ 75,000
15th Street Sewer Repair	A22183	3/7/2022	Derby City Pump & Valve Service, Inc.	\$ 500,000
SGC Gates Replacement - Construction	H22022	4/1/2022	EZ Construction Company	\$ 2,000,000
2218 Dorothy Ave	G23001	8/23/2022	Temple and Temple	\$ 50,000
2400 Northwestern Pkwy	G23001	9/26/2022	Pace Contracting, LLC	\$ 75,000
ProLogis Treatment Plant	Y23098	10/10/2022	Ulliman Schutte	\$ 75,000
Wenzel and Liberty Sewer Repair	G23001	11/25/2022	Temple and Temple	\$ 250,000
7309 Ethan Allen Way	G23001	12/2/2022	Seven Seas Construction	\$ 75,000
SORF Effluent Line Repair	G23001	12/7/2022	TRC, LLC (WBE)	\$ 50,000
Mellwood Closure	F21096	TBD	MAC Construction	\$ 65,000
MFWQTC MEB East & West Freight Elevators	G23001	TBD	Pace Contracting, LLC	\$ 500,000

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.

Budget ID and Project Name	FY23 Budget	Lifetime Actuals	Reason
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

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	\$7.9M	\$8.5M	Awaiting estimate update.
F18515 Paddy's Run FPS Capacity Upgrade	9/21/2023	\$250.1M	\$7.7M	\$3.7M	\$7.6M	60% design is underway. EAC increased with the Stage 2 estimate. Bid packages for the pumps/motors and the early work package expected to be issued in January 2023.

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	\$8.8M	\$11.7M	Project on schedule. Demolition is continuing in several areas. Many of the gates have arrived onsite and work has begun to install them.
H21019 Rudd Ave Sewer Infrastructure Rehabilitation	1/23/2023	\$14.4M	\$8.2M	\$7.8M	\$7.7M	Project on schedule.
D20285 MFWQTC LG Dryer Replacements	1/29/2023	\$70.6M	\$7.0M	\$69.0M	\$7.3M	Awaiting arrival of flare equipment.
H22022 SGC Gate Replacements	9/15/2023	\$8.9M	\$5.9M	\$1.4M	\$5.9M	Construction ongoing.

Budget ID & Project Name	Anticipated Substantial Completion	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
G21225 MFWQTC & CMF Entrance Enhancements	10/31/2023	\$5.7 M	\$5.1M	\$0.3M	\$3.4M	Construction ongoing.

CIP MANAGEMENT TEAM MEETING HIGHLIGHTS

The CIP Management Team meeting was not held in November.

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.

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.

Notice of Advisement Log for Reporting Month

ID	Project Name	Advisement Category	Impact on FY Budget	Status
497	509 Blankenbaker Lane	New Project	\$60,000	Approved
498	Little Bee Lick Floodplain Modeling	New Project	\$49,000	Approved
499	OC PS Technical and Programmatic Support	New Project	\$50,000	Approved
500	Flood Protection PM Support	New Project	\$150,000	Approved

PROCUREMENT ACTIVITIES

A forecast of the upcoming procurement activities for the next 60 days is presented in the table below. The bid dates represent anticipated times and may be adjusted depending upon project conditions.

Potential Upcoming Construction Advertisements

Budget ID	Project Name	MSD Project Manager	Projected Advertising Start
E21062	Modesto Pump Station Elimination	Gregory Chris	12/1/2022
D22098	CCWQTC Re-rating to 9_0 MGD	Leong Steven	12/12/2022
H09196	Leven Pump Station Elimination	Corcoran Quinn	1/1/2023
H22032	DRGWQTC Sodium Bisulfite Bldg Improvements	Potempa Julie	1/3/2023
E15035	Lake Forest Pump Station Eliminations	Gregory Chris	1/10/2023
W21126	Ohio River Service Area Lift Station Rehabilitation	Gregory Chris	1/30/2023
H23013	Beargrass Interceptor Relief Rehab	Gregory Chris	1/30/2023

Bid Openings

Bids opened during the reporting month are shown below.

Budget ID	Project Name	Bid Opening	Engineer's Estimate	Awarded Bid
D22187	FFWQTC Tertiary Treatment Bldgs Roof Replacement	11/10/2022	\$ 283,000	\$ 220,800
H09182	Monticello PS Elimination	11/29/2022	\$ 242,800	\$ 339,960

Construction - Notice to Proceeds (NTP) Issued

The Notice-to-Proceeds issued for projects are listed below.

Budget ID	Project Name	NTP Date

END OF REPORT