

# Monthly Executive Report

## Financial & Capital Program Updates

As of September 30, 2022



## MONTHLY EXECUTIVE REPORT

### September 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
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

## 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 September 30, 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 September 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	There was an emergency project in September to repair a failed main at 2255 Frankfort Avenue. Estimated cost is \$100k.
Cashflow Performance*	Budget Performance Target is \$191.8M as of September 30, 2022.
Change Management Notice of Advisements (NOAs)	Twenty-five (25) NOAs were processed this month in the following advisement categories: Two (2) Project Status changes, Nine (9) EAC changes, Seven (7) new projects, Sixteen (16) budget impacts, Six (6) schedule impacts, and one (1) scope change. Note: A NOA can have more than one advisement category.

\*Discussion on Performance Target and Budget Ceiling is found on page 19.

## 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 September 2022
- Customer Statistics
- Employee Headcount
- Cash Balances
- Investment Summary
- Commercial Paper Program Summary
- Quarterly KPIs
- Mark to Market on Swaps
- Top 20 Customers

### SEPTEMBER FINANCIAL SUMMARY

#### Financial Highlights for the month of September 2022

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

#### Results of Operations for the month of September 2022

Total operating revenues were \$2.0 million favorable to budget and \$2.7 million more than September 2021. Wastewater service charges were \$958 thousand favorable to budget and \$2.0 million more than September 2021. Drainage service charges were \$315 thousand favorable to budget and \$424 thousand more than September 2021. Other operating revenues were \$792 thousand favorable to budget and \$302 thousand more than September 2021. Year to date, total operating revenues were \$5.5 million favorable to budget (wastewater service charges \$3.3 million, drainage service charges \$1.0 million and other operating income \$1.2 million).

Service and administrative expenses were \$1.0 million favorable to budget and \$1.2 million more than September 2021. Year to date, service and administrative expenses were \$4.9 million favorable to budget.

Depreciation and amortization expenses were \$385 thousand unfavorable to budget and \$879 thousand more than September 2021. Year to date, depreciation and amortization expenses were \$1.2 million unfavorable to budget.

Investment income was \$466 thousand unfavorable to budget and \$1.2 million less than September 2021. Year to date, investment income was \$95 thousand unfavorable to budget.

Interest expense was \$1.7 million favorable to budget and \$179 thousand more than September 2021. Year to date, interest expense was \$3.3 million favorable to budget. Interest expense savings are being driven by lower swap payments.

#### Statement of Cash Flows

Cash and cash equivalents increased \$5.2 million in September. Net cash provided by operating activities increased \$22.1 million. Net cash used by capital-related financing activities was \$14.2 million. Net cash used in investing activities was \$2.8 million.



# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### FINANCIAL STATEMENTS – FY23

#### Comparative Statement of Net Position

Louisville & Jefferson County Metropolitan Sewer District Monthly Comparative Statement of Net Position				
	YTD Sep-2022	YTD Sep-2021	Variance	Percent
<b>Current Assets</b>				
Unrestricted Cash & Cash Equivalents	\$119,908,134	\$104,799,496	\$15,108,638	14.42%
Sewer & Drainage Receivable	30,877,136	30,678,843	198,294	0.65%
Assessment Warrants Receivable	166,512	138,441	28,071	20.28%
Miscellaneous Receivables	(2,252,135)	(3,255,360)	1,003,225	-30.82%
Inventories	5,384,995	5,177,688	207,307	4.00%
Prepaid Expenses	8,023,280	7,937,849	85,431	1.08%
Restricted Funds	157,553,920	142,129,912	15,424,008	10.85%
Accrued Interest Receivable	340,553	231,208	109,345	47.29%
<b>Total Current Assets</b>	<b>320,002,395</b>	<b>287,838,077</b>	<b>32,164,318</b>	<b>11.17%</b>
<b>Non-Current Assets</b>				
Utility Plant in Service	4,731,509,374	4,303,354,723	428,154,652	9.95%
Accumulated Depreciation	(1,595,401,479)	(1,490,776,185)	(104,625,294)	7.02%
Construction in Progress	443,520,253	649,015,496	(205,495,243)	-31.66%
<b>Net Fixed Assets</b>	<b>3,579,628,148</b>	<b>3,461,594,034</b>	<b>118,034,115</b>	<b>3.41%</b>
<b>Non-Current Receivables</b>	<b>21,981,840</b>	<b>25,772,693</b>	<b>(3,790,853)</b>	<b>-14.71%</b>
<b>Total Assets</b>	<b>3,921,612,383</b>	<b>3,775,204,803</b>	<b>146,407,580</b>	<b>3.88%</b>
<b>Total Deferred Outflow of Resources</b>	<b>71,157,813</b>	<b>84,945,859</b>	<b>(13,788,045)</b>	<b>-16.23%</b>
<b>Total Assets &amp; Deferred Outflow of Resources</b>	<b>3,992,770,196</b>	<b>3,860,150,662</b>	<b>132,619,534</b>	<b>3.44%</b>
<b>Current Liabilities</b>				
Miscellaneous Accounts Payable	5,907,825	8,187,232	(2,279,408)	-27.84%
Accounts Payable - Construction	5,082,173	5,826,102	(743,929)	-12.77%
Contract Retainage	5,062,146	12,700,653	(7,638,507)	-60.14%
Accrued Interest Payable	41,617,010	45,284,973	(3,667,962)	-8.10%
Current Maturities of Bonds Payable	52,880,000	51,230,000	1,650,000	3.22%
Current Maturities of Subordinate Debt	1,637,507	1,867,099	(229,592)	-12.30%
Deposits Payable	2,128,240	2,988,278	(860,038)	-28.78%
Accrued Salaries & Wages	1,372,560	2,621,889	(1,249,329)	-47.65%
Accrued Workers' Comp Insurance	1,767,997	2,652,990	(884,993)	-33.36%
Employee Comp Absences Payable	4,204,127	4,142,924	61,203	1.48%
<b>Total Current Liabilities</b>	<b>121,659,584</b>	<b>137,502,138</b>	<b>(15,842,555)</b>	<b>-11.52%</b>
<b>Non-Current Liabilities</b>				
Long-Term Senior Debt Payable	2,228,405,000	2,056,535,000	171,870,000	8.36%
Long-Term Subordinate Debt Payable	359,207,743	467,472,063	(108,264,320)	-23.16%
Other Long-Term Liability	283,381,828	252,204,336	31,177,493	12.36%
<b>Total Non-Current Liabilities</b>	<b>2,870,994,571</b>	<b>2,776,211,398</b>	<b>94,783,173</b>	<b>3.41%</b>
<b>Total Liabilities</b>	<b>2,992,654,155</b>	<b>2,913,713,537</b>	<b>78,940,618</b>	<b>2.71%</b>
<b>Total Deferred Inflow of Resources</b>	<b>55,093,176</b>	<b>10,159,156</b>	<b>44,934,020</b>	<b>442.30%</b>
<b>Total Liabilities &amp; Deferred Inflow of Resources</b>	<b>3,047,747,331</b>	<b>2,923,872,693</b>	<b>123,874,638</b>	<b>4.24%</b>
<b>Net Position</b>	<b>945,022,866</b>	<b>866,468,091</b>	<b>78,554,774</b>	<b>9.07%</b>
<b>Total Liabilities, Deferred Inflow of Resources and Net Position</b>	<b>3,992,770,196</b>	<b>3,790,340,784</b>	<b>202,429,412</b>	<b>5.34%</b>

# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### Statement of Revenues, Expenses & Change in Net Position

Louisville & Jefferson County Metropolitan Sewer District							
Monthly Statement of Revenues, Expenses, and Changes in Net Position							
September 30, 2022							
	YTD	YTD	YTD	% YTD	YTD	YTD	% YTD
	Actual	Budget	Variance	Variance	Prior Year	Variance	Variance
<b>Wastewater Charges</b>							
Residential	\$ 42,748,847	\$ 42,113,593	\$ 635,254	1.5%	\$ 39,270,775	\$ 3,478,073	8.9%
Commercial	25,214,003	23,304,056	1,909,947	8.2%	22,752,105	2,461,898	10.8%
Industrial	6,717,790	6,130,671	587,119	9.6%	5,935,219	782,571	13.2%
Other Wastewater	3,849,320	2,480,894	1,368,426	55.2%	2,433,908	1,415,412	58.2%
Free Wastewater Charges	(2,682,661)	(1,500,971)	(1,181,690)	78.7%	(1,659,352)	(1,023,308)	61.7%
<b>Total Wastewater Charges</b>	<b>75,847,300</b>	<b>72,528,243</b>	<b>3,319,057</b>	<b>4.6%</b>	<b>68,732,655</b>	<b>7,114,645</b>	<b>10.4%</b>
<b>Drainage</b>							
Residential	8,369,360	7,900,396	468,964	5.9%	7,452,925	916,435	12.3%
Commercial	12,835,517	12,320,689	514,828	4.2%	11,952,762	882,755	7.4%
Industrial	1,520,012	1,479,596	40,416	2.7%	1,395,792	124,219	8.9%
Other Stormwater	1,012,459	903,601	108,858	12.0%	823,812	188,647	22.9%
Free Stormwater Charges	(650,155)	(601,411)	(48,744)	8.1%	(601,360)	(48,795)	8.1%
<b>Total Drainage Charges</b>	<b>23,087,193</b>	<b>22,002,871</b>	<b>1,084,322</b>	<b>4.9%</b>	<b>21,023,932</b>	<b>2,063,262</b>	<b>9.8%</b>
<b>Total Service Charges</b>	<b>98,934,493</b>	<b>94,531,114</b>	<b>4,403,379</b>	<b>4.7%</b>	<b>89,756,586</b>	<b>9,177,907</b>	<b>10.2%</b>
<b>Other Operating Income</b>	<b>2,257,987</b>	<b>1,114,784</b>	<b>1,143,203</b>	<b>102.5%</b>	<b>1,702,988</b>	<b>554,999</b>	<b>32.6%</b>
<b>Total Operating Revenue</b>	<b>101,192,480</b>	<b>95,645,898</b>	<b>5,546,582</b>	<b>5.8%</b>	<b>91,459,575</b>	<b>9,732,906</b>	<b>10.6%</b>
<b>Operating Expenses</b>							
Salaries & Wages	13,999,822	15,562,928	(1,563,107)	-10.0%	12,751,343	1,248,478	9.8%
Labor Related Overhead	6,174,201	7,249,401	(1,075,200)	-14.8%	6,345,328	(171,127)	-2.7%
Utilities	4,503,009	4,111,567	391,443	9.5%	3,670,953	832,056	22.7%
Materials & Supplies	2,209,947	2,232,205	(22,258)	-1.0%	1,906,288	303,659	15.9%
Contractual Services	7,179,259	9,229,035	(2,049,776)	-22.2%	8,077,267	(898,009)	-11.1%
Chemicals	1,551,029	2,313,730	(762,701)	-33.0%	1,545,167	5,862	0.4%
Fuel	467,643	556,402	(88,759)	-16.0%	346,223	121,420	35.1%
Insurance Premiums & Claims	1,911,049	1,569,362	341,687	21.8%	1,393,792	517,257	37.1%
Bad Debt	1,019,608	883,829	135,779	15.4%	1,157,208	(137,600)	-11.9%
Other Operating Expense	370,325	621,438	(251,113)	-40.4%	239,955	130,370	54.3%
Mapping/Insurance Recovery	-	-	-	0.0%	-	0	0.0%
Capitalized Overhead	(9,403,279)	(10,639,175)	1,235,896	-11.6%	(9,061,248)	(342,030)	3.8%
Capital Expenses (over)/under applied							
<b>Net Service and Administrative Costs</b>	<b>29,982,613</b>	<b>33,690,721</b>	<b>(3,708,109)</b>	<b>-11.0%</b>	<b>28,372,276</b>	<b>1,610,336</b>	<b>5.7%</b>
Depreciation	27,092,500	25,865,001	1,227,499	4.7%	24,521,447	2,571,053	10.5%
Amortization	392,333	448,991	(56,658)	-12.6%	285,252	107,081	37.5%
<b>Total Depreciation/Amortization</b>	<b>27,484,833</b>	<b>26,313,992</b>	<b>1,170,840</b>	<b>4.4%</b>	<b>24,806,698</b>	<b>2,678,134</b>	<b>10.8%</b>
<b>Total Operating Expenses</b>	<b>57,467,445</b>	<b>60,004,714</b>	<b>(2,537,268)</b>	<b>-4.2%</b>	<b>53,178,975</b>	<b>4,288,471</b>	<b>8.1%</b>
<b>Net Operating Income</b>	<b>43,725,035</b>	<b>35,641,185</b>	<b>8,083,850</b>	<b>22.7%</b>	<b>38,280,600</b>	<b>5,444,435</b>	<b>14.2%</b>
<b>Non-Operating Revenue (Expenses)</b>							
Gain/Loss Disposal of Assets	0	300	(300)	0.0%	74,983	(74,983)	0.0%
Investment Income	2,786,452	2,881,200	(94,748)	-3.3%	2,792,708	(6,256)	-0.2%
Interest Expense	(21,872,420)	(25,222,320)	3,349,900	-13.3%	(24,429,977)	2,557,556	-10.5%
<b>Total Non-Operating Revenue (Expenses)</b>	<b>(19,085,969)</b>	<b>(22,340,820)</b>	<b>3,254,852</b>	<b>-14.6%</b>	<b>(21,562,286)</b>	<b>2,476,318</b>	<b>-11.5%</b>
Contributions	475,275.62	-	475,276	0.0%	91,519	(383,757)	419.3%
<b>Change in Net Position Before Swaps</b>	<b>25,114,342</b>	<b>13,300,365</b>	<b>11,813,978</b>	<b>88.8%</b>	<b>16,809,833</b>	<b>(8,304,510)</b>	<b>49.4%</b>
<b>Change in Fair Value of Swaps</b>	<b>(3,123,298)</b>	<b>-</b>	<b>(3,123,298)</b>	<b>0.0%</b>	<b>(1,892,641)</b>	<b>1,230,657</b>	<b>65.0%</b>
<b>Change in Net Position After Swaps</b>	<b>\$ 21,991,044</b>	<b>\$ 13,300,365</b>	<b>\$ 8,690,680</b>	<b>65.3%</b>	<b>\$ 14,917,192</b>	<b>\$ (7,073,852)</b>	<b>47.4%</b>

# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### Statement of Cash Flows

Louisville and Jefferson County Metropolitan Sewer District Statement of Cash Flows For the Month Ended, September 30, 2022		
	FY 2023 YTD	FY 2022 YTD
<b>Cash Flows from Operating Activities</b>		
Cash received from customers	\$ 98,837,406	\$ 88,793,266
Cash paid to suppliers	(25,107,861)	(27,684,531)
Cash paid to employees	(17,214,433)	(14,114,687)
<b>Net Cash Provided by Operating Activities</b>	<b>56,515,112</b>	<b>46,994,048</b>
<b>Cash Flows from Capital and Related Financing Activities</b>		
Proceeds from issuance of revenue bonds	-	-
Proceeds from issuance of bond anticipation note	2,263,400	2,263,400
Proceeds from issuance of commercial paper	70,000,000	145,000,000
Proceeds from issuance of notes	-	-
Proceeds from issuance of other subordinated debt	-	-
Payments for retirement of revenue bonds	-	(3,435,996)
Payments for retirement of bond anticipation note	-	-
Payments for retirement of commercial paper	(40,000,000)	(100,000,000)
Payments for retirement of notes	-	-
Payments for retirement of other subordinated debt	(400,000)	(385,000)
Payments for interest expense	(702,069)	(563,707)
Payments for interest on swaps	(1,096,830)	(2,718,360)
Build America bond interest subsidy	2,746,538	2,597,851
Proceeds from capital grants	-	-
Proceeds from sale of capital assets	-	74,983
Payments for capital assets	(44,709,482)	(54,828,541)
Proceeds from assessments	240,997	360,616
<b>Net Cash Provided (Used) by Capital and Related Financing</b>	<b>(11,657,446)</b>	<b>(11,634,754)</b>
<b>Cash Flows from Investing Activities</b>		
Purchase of investments	(37,464,371)	(49,450,763)
Maturity of investments	22,209,531	15,003,794
Investment income	(2,026,248)	317,467
<b>Net Cash Provided (Used) by Investing Activities</b>	<b>(17,281,088)</b>	<b>(34,129,502)</b>
Net Increase (Decrease) in Cash and Cash Equivalents	27,576,578	1,229,792
Cash and Cash Equivalents, Beginning of Year	71,854,355	101,985,796
<b>Cash and Cash Equivalents, End of Year</b>	<b>\$ 99,430,933</b>	<b>\$ 103,215,588</b>
<b>Reconciliation of Operating Income to Net Cash provided by Operating Activities</b>		
Income from operations	\$ 43,725,035	\$ 38,280,600
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation and amortization	27,484,833	24,806,698
Accounts receivable	(2,563,212)	(2,897,970)
Inventories	(122,714)	(91,601)
Prepaid expense	(5,074,208)	(1,782,321)
Accounts payable	(3,899,396)	(10,216,547)
Customer deposits	208,137	231,661
Accrued liabilities	(3,243,363)	1,336,472
Pension liability	-	-
OPEB liability	-	-
<b>Net Cash Provided by Operating Activities</b>	<b>\$ 56,515,112</b>	<b>\$ 49,666,992</b>
<b>Non-Cash Capital Financing and Investing Activities</b>		
Contribution of plant, lines and other facilities by developers and property owners	\$ -	\$ -
Construction costs in accounts payable	10,144,318	18,526,754
Change in fair value of investments	770,211	96,085
Decrease in interest rate swap deferred revenue	(124,238)	(124,238)
Change in fair value - swap agreements	(3,123,298)	1,892,641
Bonds issued for refunding of debt	-	246,555,000

# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### Actual vs. Budget Operating and Maintenance Expenses

Louisville & Jefferson County Metropolitan Sewer District Operating and Maintenance Expenses September 30, 2022							
	YTD Actual	YTD Budget	YTD Variance	% YTD Variance	YTD Prior Year	YTD Variance	% YTD Variance
<b>Salaries &amp; Wages</b>							
51120 - Regular Salaries & Wages	\$ 11,614,232	\$ 14,907,623	\$ (3,293,391)	-22.1%	\$ 10,699,134	\$ 915,098	8.6%
51130 - Overtime	710,042	557,482	152,559	27.4%	516,601	193,441	37.4%
51135 - Special Event Compensation	42,690	90,681	(47,991)	-52.9%	34,390	8,300	24.1%
51140 - Wages pd for vacation, holidays & other	1,615,650	0	1,615,650	0.0%	1,476,374	139,275	9.4%
51145 - Incentive Pay - Performance, ERT, Sugg	12,334	0	12,334	0.0%	19,144	(6,811)	-35.6%
51147 - Service & Safety Incentive Awards	4,875	7,142	(2,267)	-31.7%	5,700	(825)	-14.5%
<b>Total Salaries &amp; Wages</b>	<b>13,999,822</b>	<b>15,562,928</b>	<b>(1,563,107)</b>	<b>-10.0%</b>	<b>12,751,343</b>	<b>1,248,478</b>	<b>9.8%</b>
<b>Labor &amp; Related Overhead</b>							
51210 - Short-Term Disability	55,226	0	55,226	0.0%	105,226	(50,000)	-47.5%
51220 - Workers' Compensation Insurance	29,884	81,252	(51,368)	-63.2%	50,288	(20,404)	-40.6%
51225 - Workers' Compensation Claims	(1,493)	298,152	(299,645)	-100.5%	116,452	(117,944)	-101.3%
51230 - Long-Term Disability	(12,648)	12,600	(25,248)	-200.4%	(4,959)	(7,689)	155.0%
51240 - Group Life - AD&D Insurance	4,457	9,900	(5,443)	-55.0%	9,027	(4,570)	-50.6%
51250 - Tuition Assistance	(19,855)	22,497	(42,352)	-188.3%	10,067	(29,923)	-297.2%
51260 - Empl Assistance & Wellness Program	20	3,501	(3,481)	-99.4%	0	20	0.0%
51300 - Payroll Taxes	1,013,927	1,128,620	(114,693)	-10.2%	753,922	260,004	34.5%
51400 - Unemployment Insurance	0	8,321	(8,321)	0.0%	(35,776)	35,776	0.0%
51500 - Med Ins: MSD's port. of prem for grp	1,541,932	1,893,789	(351,857)	-18.6%	1,824,838	(282,906)	-15.5%
51600 - Retirement Contributions	3,562,751	3,790,768	(228,017)	-6.0%	3,516,243	46,508	1.3%
<b>Total Labor &amp; Related Overhead</b>	<b>6,174,201</b>	<b>7,249,401</b>	<b>(1,075,200)</b>	<b>-14.8%</b>	<b>6,345,328</b>	<b>(171,127)</b>	<b>-2.7%</b>
<b>Utilities</b>							
53310 - Electric	3,312,569	3,080,205	232,364	7.5%	2,905,382	407,187	14.0%
53320 - Natural Gas	310,260	247,733	62,527	25.2%	64,851	245,410	378.4%
53330 - Water	573,367	363,379	209,988	57.8%	380,106	193,261	50.8%
53340 - Telephone	84,919	78,250	6,669	8.5%	55,108	29,810	54.1%
53345 - Data Communications	221,895	342,000	(120,105)	-35.1%	265,506	(120,105)	-16.4%
<b>Total Utilities</b>	<b>4,503,009</b>	<b>4,111,567</b>	<b>391,443</b>	<b>9.5%</b>	<b>3,670,953</b>	<b>755,563</b>	<b>22.7%</b>
<b>Materials &amp; Supplies</b>							
53100 - Tires & Tire Service Expense	63,536	85,742	(22,206)	-25.9%	0	63,536	0.0%
53140 - Materials & Supplies	2,063,359	2,051,963	11,395	0.6%	1,697,374	365,985	21.6%
53150 - Inventory Adjustments	23,436	0	23,436	0.0%	0	23,436	0.0%
53160 - Landfill Cost of fill dirt	59,616	94,500	(34,884)	-36.9%	208,914	(149,298)	-71.5%
<b>Total Materials &amp; Supplies</b>	<b>2,209,947</b>	<b>2,232,205</b>	<b>(22,258)</b>	<b>-1.0%</b>	<b>1,906,288</b>	<b>303,659</b>	<b>15.9%</b>
<b>Contractual Services</b>							
51700 - Uniforms	59,401	63,135	(3,734)	-5.9%	58,905	496	0.8%
52110 - Billing & Collection	1,691,424	1,686,901	4,523	0.3%	1,559,333	132,092	8.5%
52130 - Custodial & Watchmen	192,998	210,651	(17,653)	-8.4%	171,337	21,660	12.6%
52140 - Professional Services	444,390	1,123,175	(678,785)	-60.4%	499,356	(54,967)	-11.0%
52145 - Legal	90,726	317,660	(226,934)	-71.4%	69,971	20,755	29.7%
52155 - Banking Services	14,016	19,650	(5,634)	-28.7%	17,818	(3,802)	-21.3%
52160 - Maintenance & Repairs	1,123,847	1,527,223	(403,376)	-26.4%	1,182,039	(58,191)	-4.9%
52170 - Sludge & Grit Disposal	791,249	746,693	44,556	6.0%	1,635,154	(843,905)	-51.6%
52180 - Temporary Services	38,214	67,967	(29,752)	-43.8%	50,291	(12,076)	-24.0%
52195 - Other Contractual Services	2,732,993	3,465,980	(732,987)	-21.1%	2,833,064	(100,071)	-3.5%
<b>Total Contractual Services</b>	<b>7,179,259</b>	<b>9,229,035</b>	<b>(2,049,776)</b>	<b>-22.2%</b>	<b>8,077,267</b>	<b>(898,009)</b>	<b>-11.1%</b>
<b>Bad Debt</b>							
54200 - Bad Debts	944,608	883,829	60,779	6.9%	1,007,208	(62,600)	-6.2%
54210 - Bad Debt - Assessments	75,000	0	75,000	0.0%	150,000	(75,000)	-50.0%
<b>Total Bad Debt</b>	<b>1,019,608</b>	<b>883,829</b>	<b>135,779</b>	<b>15.4%</b>	<b>1,157,208</b>	<b>(137,600)</b>	<b>-11.9%</b>
<b>Chemicals</b>							
53205 - Peracetic Acid	0	50,000	(50,000)	0.0%	0	0	0.0%
53210 - Chlorine	0	2,363	(2,363)	0.0%	0	0	0.0%
53215 - Sodium Hypochlorite	416,687	563,527	(146,839)	-26.1%	205,480	211,208	102.8%
53220 - Polymer	640,698	975,422	(334,724)	-34.3%	754,770	(114,072)	-15.1%
53225 - Sodium Aluminate	41,713	107,808	(66,095)	-61.3%	40,522	1,191	2.9%
53230 - Liquid Oxygen	49,243	82,129	(32,886)	-40.0%	78,475	(29,233)	-37.3%
53235 - Liquid Nitrogen	5,607	22,146	(16,539)	-74.7%	0	5,607	0.0%
53240 - Other Chemicals	2,396	13,277	(10,880)	-82.0%	16,135	(13,739)	-85.1%
53250 - Dechlorination	78,556	186,943	(108,387)	-58.0%	93,714	(15,158)	-16.2%
53275 - Defoamer	0	9,929	(9,929)	0.0%	0	0	0.0%
53280 - Bioxide	316,128	300,000	16,128	5.4%	356,071	(39,943)	-11.2%
53285 - Sodium Hydroxide	0	188	(188)	0.0%	0	0	0.0%
<b>Total Chemicals</b>	<b>1,551,029</b>	<b>2,313,730</b>	<b>(762,701)</b>	<b>-33.0%</b>	<b>1,545,167</b>	<b>5,862</b>	<b>0.4%</b>
<b>Fuel</b>							
53120 - Gasoline	191,689	221,000	(29,311)	-13.3%	152,090	39,599	26.0%
53130 - Diesel Fuel	275,954	335,402	(59,448)	-17.7%	194,133	81,821	42.1%
<b>Total Fuel</b>	<b>467,643</b>	<b>556,402</b>	<b>(88,759)</b>	<b>-16.0%</b>	<b>346,223</b>	<b>121,420</b>	<b>35.1%</b>
<b>Insurance Premiums &amp; Claims</b>							
54110 - General Liability Insurance	1,047,537	923,067	124,470	13.5%	708,148	339,390	47.9%
54130 - Property Insurance	552,617	506,982	45,635	9.0%	506,983	45,634	9.0%
54140 - General Liability Claims	310,895	139,313	171,582	123.2%	178,661	132,234	74.0%
<b>Total Insurance Premiums &amp; Claims</b>	<b>1,911,049</b>	<b>1,569,362</b>	<b>341,687</b>	<b>21.8%</b>	<b>1,393,792</b>	<b>517,257</b>	<b>37.1%</b>
<b>Other Operating Expense</b>							
53410 - Equipment Rental	119,961	53,507	66,454	124.2%	66,887	53,074	79.3%
53420 - Space Rent	7,500	7,500	0	0.0%	7,500	0	0.0%
53430 - Leased Parking	20,806	19,885	921	4.6%	(450)	21,256	-4723.6%
54250 - Contributions	12,769	30,500	(17,731)	-58.1%	0	12,769	0.0%
54300 - Fines, Penalties & Damages	0	0	0	0.0%	4,399	(4,399)	0.0%
54400 - Advertising	6,672	51,477	(44,806)	-87.0%	3,747	2,924	78.0%
54500 - Travel & Meetings	56,230	155,607	(99,377)	-63.9%	14,597	41,632	285.2%
54550 - Training	42,847	160,694	(117,847)	-73.3%	9,973	32,875	329.6%
54600 - Dues, Fees and Subscriptions	100,821	138,669	(37,847)	-27.3%	132,441	(31,620)	-23.9%
54700 - Board Members	1,400	3,600	(2,200)	-61.1%	2,150	(750)	-34.9%
55555 - Over/under payments	1,320	0	1,320	0.0%	(1,289)	2,608	-202.4%
<b>Total Other Operating Expense</b>	<b>370,325</b>	<b>621,438</b>	<b>(251,113)</b>	<b>-40.4%</b>	<b>239,955</b>	<b>130,370</b>	<b>54.3%</b>
<b>Grand Total</b>	<b>39,385,891</b>	<b>44,329,896</b>	<b>(4,944,005)</b>	<b>-11.2%</b>	<b>37,433,525</b>	<b>1,875,873</b>	<b>5.2%</b>

MONTHLY EXECUTIVE REPORT  
September 30, 2022

**SUPPLEMENTAL FINANCIAL REPORTING**

*Revenue by Customer Class*

	Number of Customers		Revenue by Customer Class		Budget By Customer Class	
	Sep-2022	Sep-2021	Sep-2022	Sep-2021	Sep-2022	Sep-2021
<b>Wastewater</b>						
Residential	235,670	229,881	14,156,324	13,263,615	14,080,036	12,200,062
Commercial	21,918	21,571	9,066,348	8,458,708	8,562,016	8,228,299
Industrial	394	392	2,255,461	1,904,912	1,959,345	2,267,121
<b>Sub-Total</b>	<b>257,982</b>	<b>251,844</b>	<b>25,478,133</b>	<b>23,627,235</b>	<b>24,601,397</b>	<b>22,695,483</b>
<b>Drainage</b>						
Residential	209,441	208,184	2,691,367	2,402,999	2,547,274	2,338,456
Commercial	14,013	14,050	4,157,951	4,078,881	4,004,723	4,043,663
Industrial	275	269	501,740	482,037	510,978	460,434
<b>Sub-Total</b>	<b>223,729</b>	<b>222,503</b>	<b>7,351,058</b>	<b>6,963,917</b>	<b>7,062,975</b>	<b>6,842,553</b>
<b>Grand Total</b>			<b>\$ 32,829,191</b>	<b>\$ 30,591,152</b>	<b>\$ 31,664,372</b>	<b>\$ 29,538,036</b>

\*September 2022 includes acquired Bullitt County Sanitation District customers.

*Wastewater Revenue by County*

	Number of Customers		Revenue by Customer Class		Budget by Customer Class	
	Sep-2022	Sep-2021	Sep-2022	Sep-2021	Sep-2022	Sep-2021
<b>Jefferson County</b>						
Residential	224,285	223,504	13,416,691	12,754,048	13,343,524	11,698,062
Commercial	21,526	21,419	8,905,695	8,379,574	8,425,353	8,175,699
Industrial	392	391	2,253,535	1,904,822	1,956,899	2,267,031
<b>Sub-Total</b>	<b>246,203</b>	<b>245,314</b>	<b>24,575,921</b>	<b>23,038,444</b>	<b>23,725,776</b>	<b>22,140,793</b>
<b>Bullitt County</b>						
Residential	4,531	0	234,985	-	239,492	-
Commercial	116	0	95,277	-	86,870	-
Industrial	1	0	1,836	-	2,356	-
<b>Sub-Total</b>	<b>4,648</b>	<b>0</b>	<b>332,099</b>	<b>-</b>	<b>328,718</b>	<b>-</b>
<b>Oldham County</b>						
Residential	6,854	6,377	504,648	509,568	497,020	502,000
Commercial	276	152	65,376	79,134	49,793	52,600
Industrial	1	1	90	90	90	90
<b>Sub-Total</b>	<b>7,131</b>	<b>6,530</b>	<b>570,114</b>	<b>588,791</b>	<b>546,903</b>	<b>554,690</b>
<b>Grand Total</b>			<b>\$ 25,478,133</b>	<b>\$ 23,627,235</b>	<b>\$ 24,601,397</b>	<b>\$ 22,695,483</b>

## MONTHLY EXECUTIVE REPORT September 30, 2022

### 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 September 30, 2022.

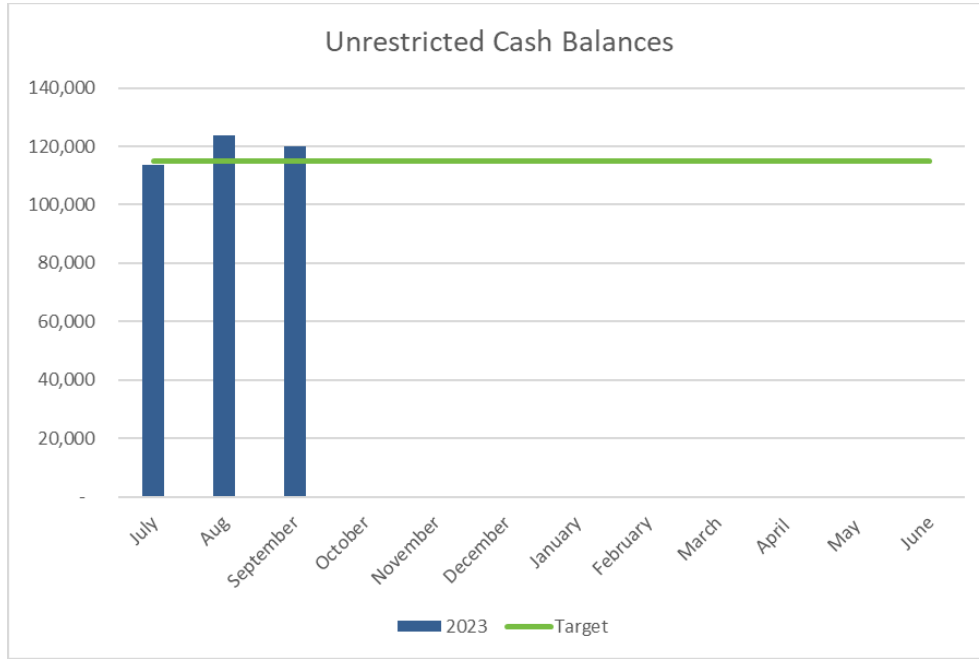
FY23 Headcount by Division			
	Budget Approved	Current Authorized	Filled
Administration			
Community Benefits & Partnerships	5	5	5
Customer Relations	22	22	17
Executive Offices	3	3	3
Facilities	9	8	7
Government & Public Affairs	6	6	5
Innovation	3	3	3
Internal Audit	4	4	3
Records and Information Governance	9	10	9
Safety & Security	21	21	16
Corporate	1	1	1
Engineering	101	96	88
Finance	19	19	17
Human Resources	21	21	17
Information Technology	32	32	28
Legal	12	10	7
Operations	502	497	416
Supply Chain & Economic Inclusion	27	24	22
<b>Total Authorized Positions</b>	<b>797</b>	<b>782</b>	<b>664</b>
*Excludes temporary & seasonal staff			

# MONTHLY EXECUTIVE REPORT

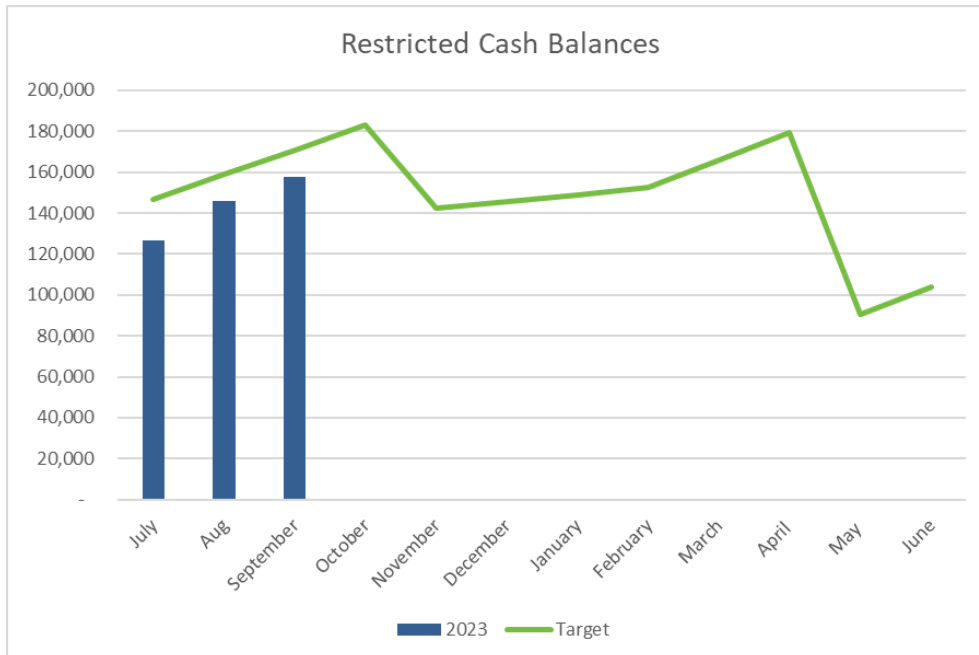
## September 30, 2022

### 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.



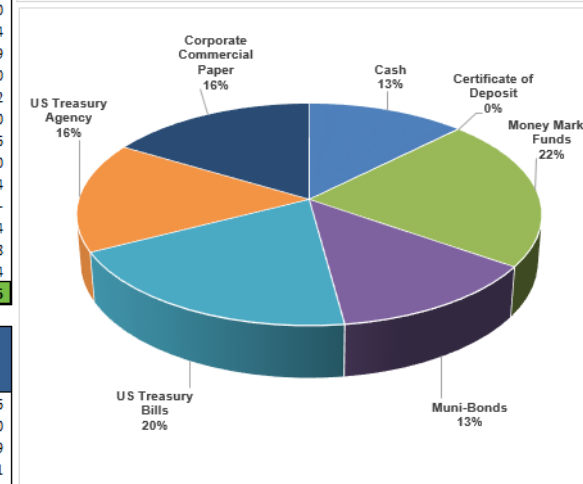
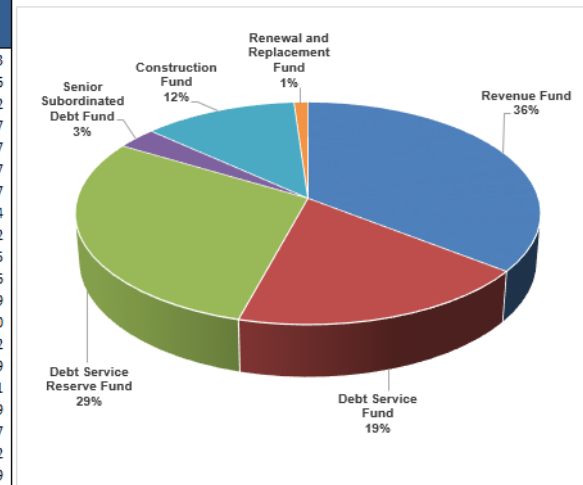
# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### 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
2008A	-	-	946,053	-	-	-	946,053
2009A	-	-	4,291,456	-	-	-	4,291,456
2009B	-	-	13,421,142	-	-	-	13,421,142
2009C	-	4,157,820	13,183,487	-	-	-	17,341,307
2010A	-	6,954,158	17,842,579	-	-	-	24,796,737
2013A	-	1,590,918	26,397,839	-	-	-	27,988,757
2013B	-	2,159,507	-	-	-	-	2,159,507
2013C	-	43,835	97,090	-	-	-	140,924
2014A	-	1,170,792	-	-	-	-	1,170,792
2015A	-	2,568,837	150,599	-	-	-	2,719,435
2015B	-	1,917,766	-	-	-	-	1,917,766
2016A	-	1,937,579	-	-	-	-	1,937,579
2016B	-	995,800	-	-	-	-	995,800
2016C	-	4,710,742	-	-	-	-	4,710,742
2017A	-	4,208,380	1,452,309	-	-	-	5,660,689
2017B	-	844,681	-	-	-	-	844,681
2018A	-	833,529	-	-	-	-	833,529
2019A	-	3,473,987	-	-	-	-	3,473,987
2020A	-	2,469,341	2,132,411	-	-	-	4,601,752
2020C	-	1,181,439	-	-	-	-	1,181,439
2021A	-	6,049,800	-	-	-	-	6,049,800
2022A	-	3,613,860	-	-	33,222,884	-	36,836,744
2021 BAN	-	-	-	6,296,579	-	-	6,296,579
2022 BAN	-	-	-	2,263,400	-	-	2,263,400
Renewal & Replacement	-	-	-	-	-	2,992,892	2,992,892
CP 2018 A-1 & A-2	-	-	-	-	3,800	-	3,800
Cash	31,803,386	-	-	-	-	-	31,803,386
Certificate of Deposit	100,000	-	-	-	-	-	100,000
Money Market Funds	19,764	-	-	-	-	-	19,764
Muni-Bonds	-	-	-	-	-	-	-
US Treasury Bills	27,307,074	-	-	-	-	-	27,307,074
US Treasury Agency	5,034,338	-	-	-	-	-	5,034,338
Corporate Commercial Paper	32,522,924	-	-	-	-	-	32,522,924
	\$ 96,787,486	\$ 50,882,769	\$ 79,914,965	\$ 8,559,979	\$ 33,226,683	\$ 2,992,892	\$ 272,364,775



Asset Description	Revenue Fund	Debt Service Fund	Debt Service Reserve Fund	Senior Subordinated Debt Fund	Construction Fund	Renewal and Replacement Fund	Total
Cash	31,803,386	-	-	2,263,400	-	-	34,066,786
Certificate of Deposit	100,000	-	-	-	-	-	100,000
Money Market Funds	19,764	50,882,769	2,778,980	6,296,579	289,478	1,798	60,269,369
Muni-Bonds	-	-	35,942,361	-	-	-	35,942,361
US Treasury Bills	27,307,074	-	-	-	23,075,735	2,991,094	53,373,903
US Treasury Agency	5,034,338	-	38,761,981	-	-	-	43,796,319
Corporate Commercial Paper	32,522,924	-	2,431,643	-	9,861,470	-	44,816,037
	\$ 96,787,486	\$ 50,882,769	\$ 79,914,965	\$ 8,559,979	\$ 33,226,683	\$ 2,992,892	\$ 272,364,775



## MONTHLY EXECUTIVE REPORT

### September 30, 2022

#### *Monthly Investment Activity*

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

Account	Transaction Type	Category	Amount
2013 Debt Reserve	Redemption	US Treasury Bill	(22,194,971.59)
2013 Debt Reserve	Purchase	Federal Home Loan Bank	22,194,215.78
Renewal & Replacement	Purchase	US Treasury Bill	2,993,164.06

# MONTHLY EXECUTIVE REPORT

## September 30, 2022

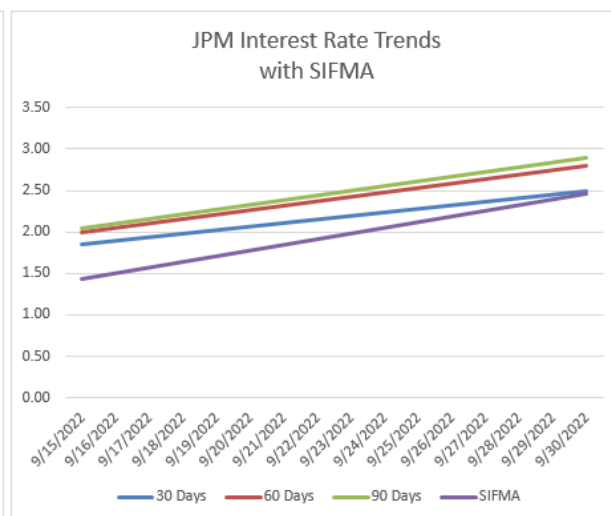
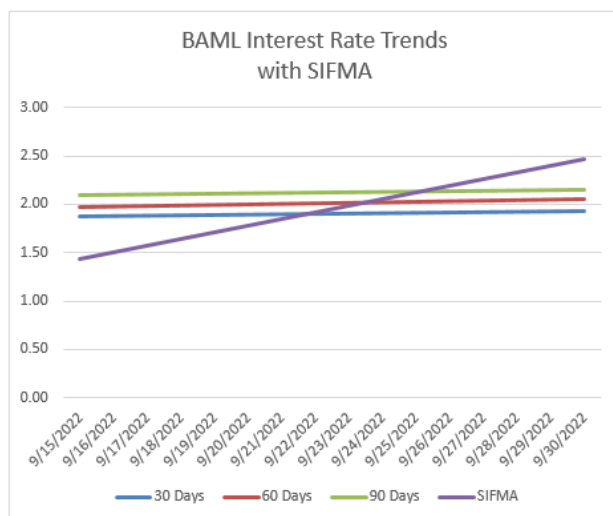
### Commercial Paper Program Summary

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 September, we had \$10M notes mature that were replaced with new notes with an average rate of 2.21% and average terms of 70 days. We did not issue any new notes in September. In October, we have three \$10M notes and one \$20M note maturing.

The CP Construction Fund balance as of September 30<sup>th</sup>, was \$3,799.31. Outstanding CP notes are currently split 37.5% with JP Morgan and 62.5% with Bank of America.

CP Issuance Details										
Currently Outstanding										
Issuance Date	CUSIP	Principal	Rate	Term (# of days)	Maturity Date	Dealer (JPM/BAML)	Interest Cost	New Issuance or Roll?	SIFMA Index	Spread over (under) SIFMA
6/29/2022	54658NDC2	10,000,000	1.59%	96	10/3/2022	JPM	41,819.18	New	0.98%	0.61%
7/7/2022	54658NDC2	10,000,000	1.38%	91	10/6/2022	BAML	34,405.48	New	0.78%	0.60%
7/14/2022	54658NDE8	10,000,000	1.45%	90	10/12/2022	BAML	35,753.42	Roll	0.69%	0.76%
8/3/2022	54658NDF5	20,000,000	1.73%	79	10/21/2022	BAML	74,887.67	New	1.33%	0.40%
8/23/2022	54658QDE1	10,000,000	1.87%	73	11/4/2022	JPM	37,400.00	Roll	1.79%	0.08%
9/16/2022	54658QDF8	10,000,000	2.17%	80	12/5/2022	JPM	47,561.64	Roll	1.44%	0.73%
9/22/2022	54658NDG3	10,000,000	2.25%	60	11/21/2022	BAML	36,986.30	Roll	1.96%	0.29%
<b>Currently Outstanding: \$ 80,000,000</b>							<b>\$ 308,814</b>			

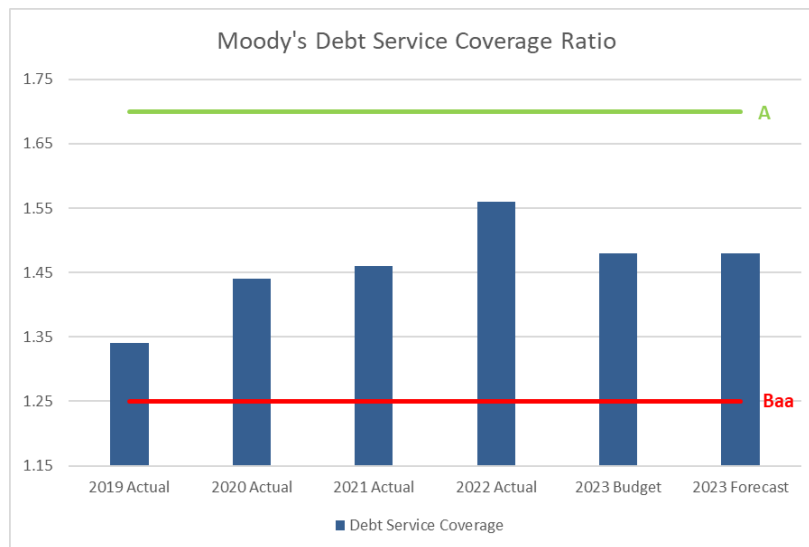
The Securities Industry and Financial Markets Association (SIFMA) publishes a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations (VRDOs) with certain characteristics. The Index is calculated and published by Bloomberg and is overseen by SIFMA's Municipal Swap Index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



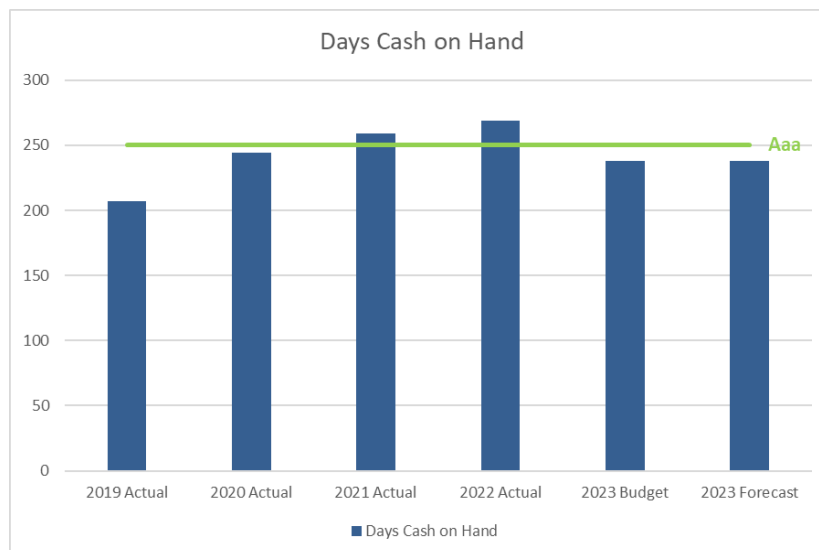
QUARTERLY FINANCIAL REPORTING

Key Performance Indicators

Debt service coverage is a key statistic assessing the financial health of a utility. The magnitude by which net revenues are sufficient to cover debt service shows a utility’s margin to tolerate business risks or declines in demand while still assuring repayment of debt. Higher coverage levels indicate greater flexibility to withstand volatile revenues, unexpected outflows, or customer resistance to higher rates. MSD has different coverage calculations required by ordinance, the General Bond Resolution and in various debt service covenants. However, for benchmarking, we focus on the Moody’s calculation which includes all debt. We strive for continuous improvement of this KPI because our ratio is near the Moody’s Baa boundary relative to our overall Aa3 rating.



Cash is the paramount resource MSD has to meet expenses and navigate business interruptions. Utilities with a lot of cash and cash equivalents are able to survive temporary disruptions and cash flow shortfalls without missing important payments. A low cash balance indicates poor flexibility to manage contingencies. MSD is in the Aaa Moody’s rating range for this KPI.

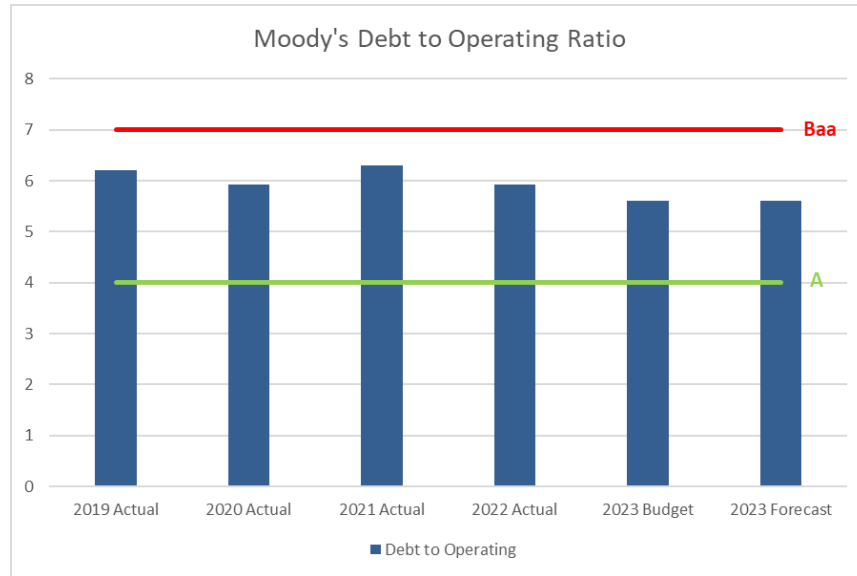


# MONTHLY EXECUTIVE REPORT

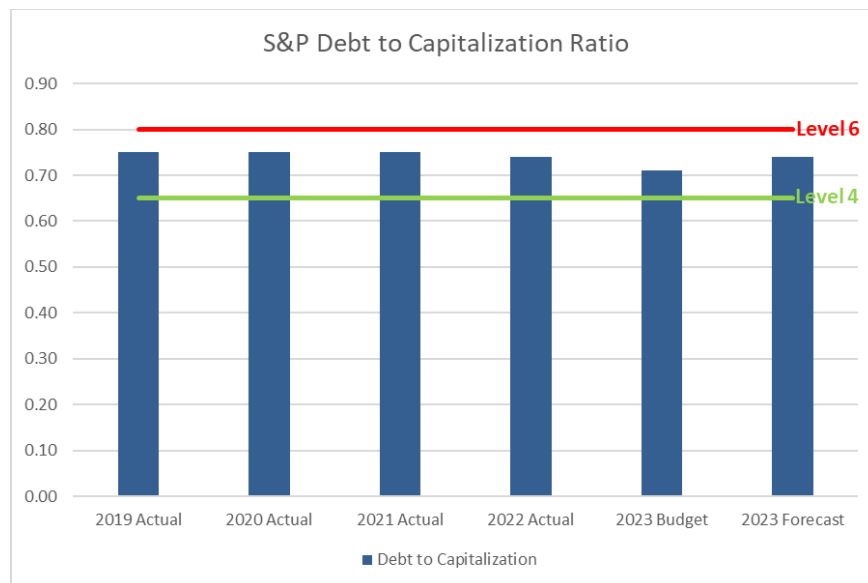
## September 30, 2022

### Key Performance Indicators – Continued

A utility's debt profile determines its leverage and fixed costs. Utilities that carry a lot of debt have less ability to reduce costs if demand shrinks and are generally more challenged to achieve higher debt service coverage. A greater debt burden may also prohibit a utility from funding necessary capital upgrades if a covenant prevents the issuer from incurring the debt necessary to fund those upgrades. MSD focuses on continuous improvement of this KPI because our ratio is near the Moody's Baa boundary relative to our overall Aa3 rating.

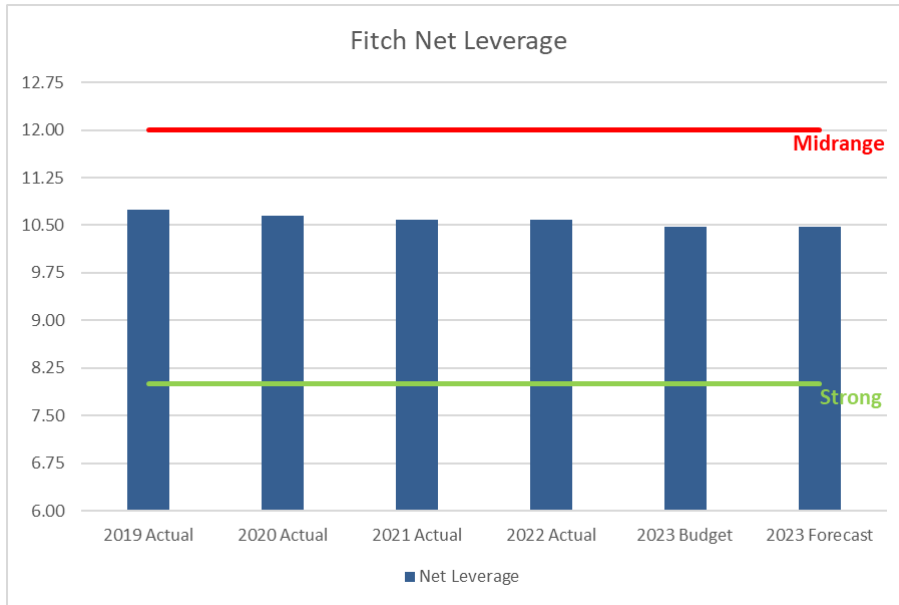


S&P Global Ratings evaluates our debt profile using a debt to total capitalization ratio. The objective is similar to what Moodys is evaluating with the debt to operating ratio. S&P considers MSD's debt to capitalization ratio relatively weak relative to our overall rating thus this is another key benchmark for us to monitor.

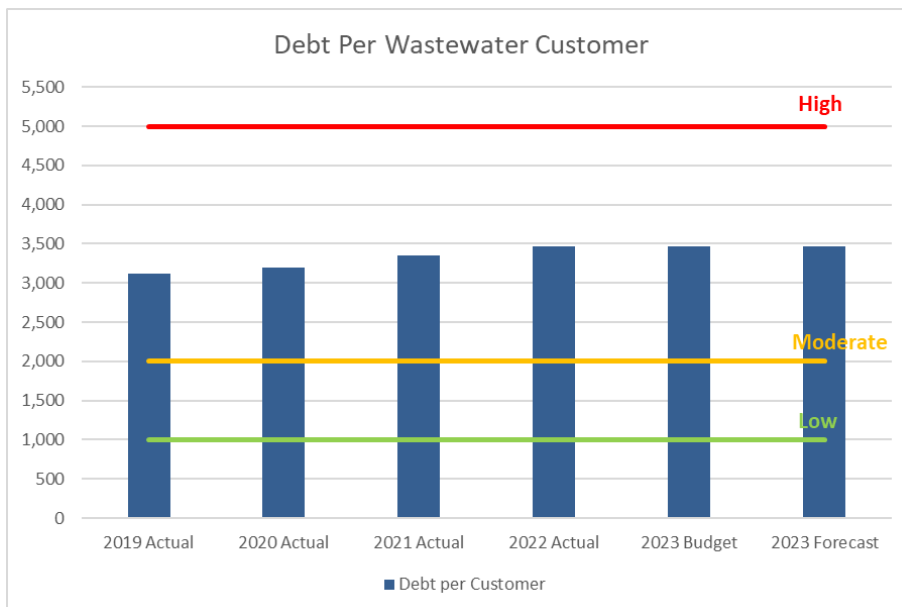


**Key Performance Indicators – Continued**

Fitch Ratings assesses the level of financial flexibility that an entity can sustain as it encounters stresses expected to occur over the relevant forecast period. Metrics are used to evaluate the entity’s liquidity profile and leverage in the context of the entity’s overall risk profile. Reducing operating leverage is generally seen as positive. MSD regularly reviews its Net Leverage profile as calculated by Fitch as a benchmarking measure.



MSD provides Debt per Wastewater Customer for informational purposes. We continue to be in a period where we are incurring more debt that we are paying off because of our spending commitments for the consent decree and to address aging infrastructure.

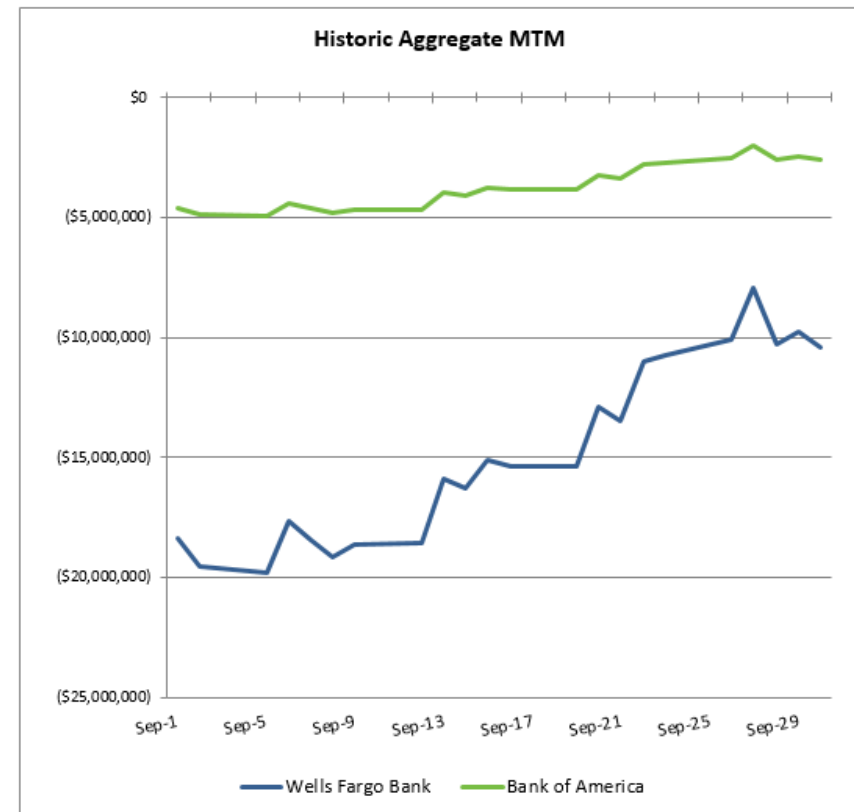
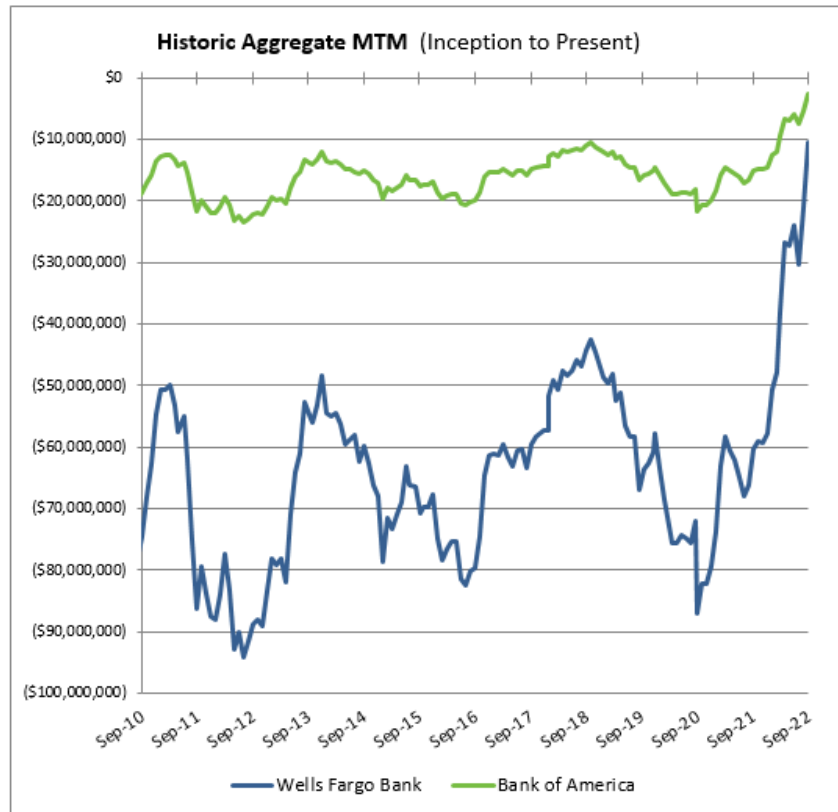


# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### Market to Market on Swaps

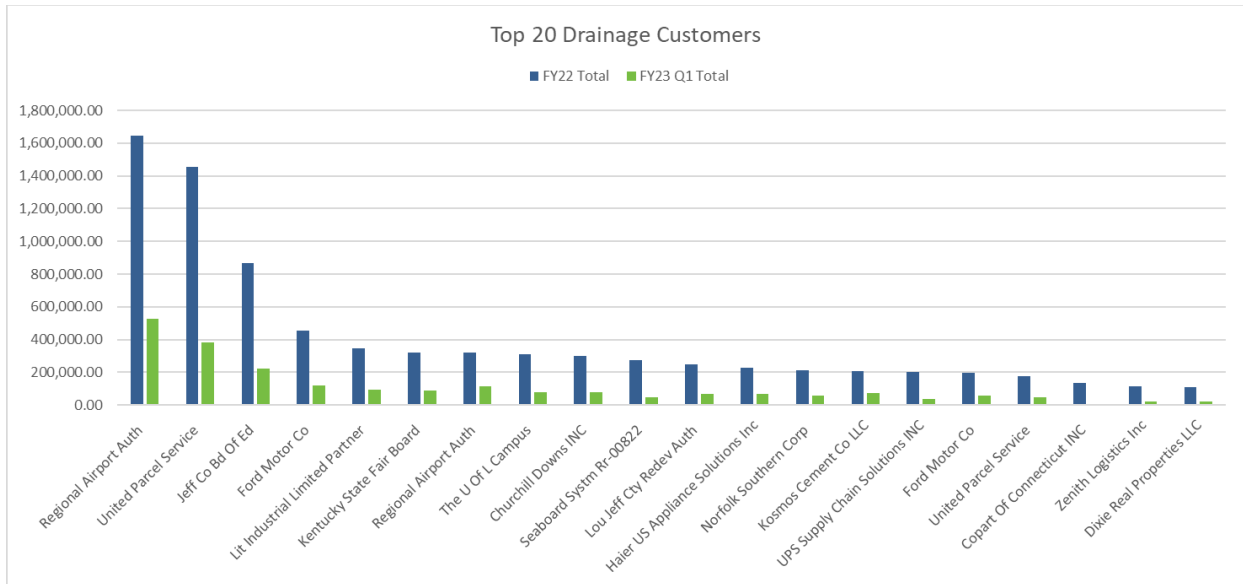
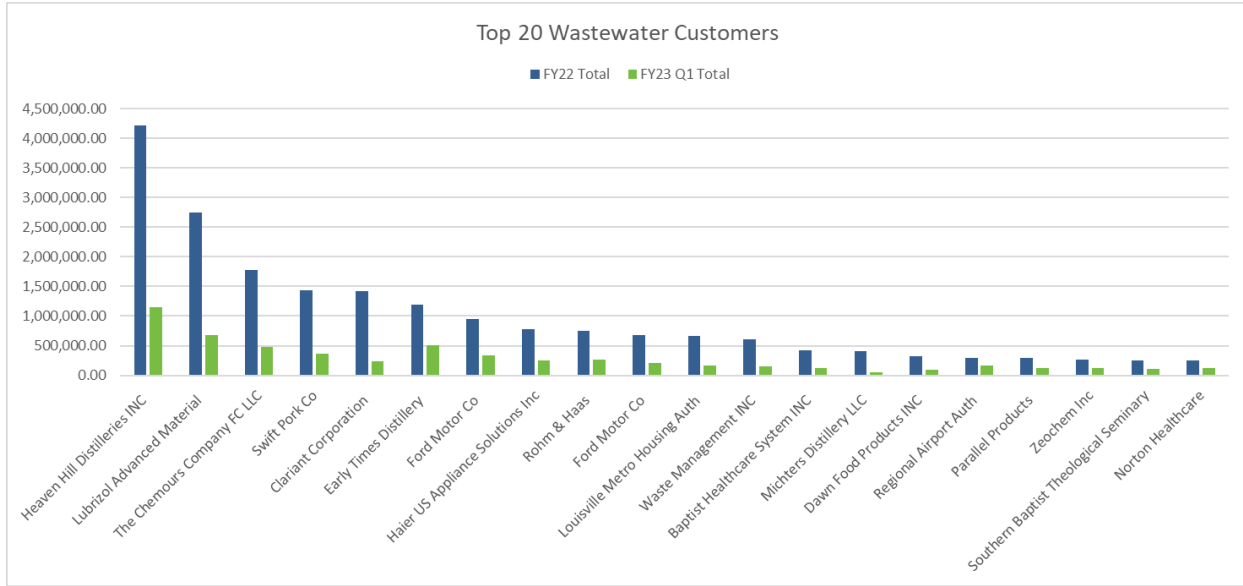
Credit Support Provider	Description	Maturity Date	Notional Amount	Outstanding Notional Amount	Clean Market Value	Accrued Interest	Market-to-Market Value
Wells Fargo NA	1999 - 1 - \$225.732M 67% LIBOR Fixed Payer	5/15/2033	180,716,000.00	180,716,000.00	(10,294,567.34)	(134,981.43)	(10,429,548.77)
Bank of America NA	1999 - 2 - \$56.433 67% LIBOR Fixed Payer	5/15/2033	56,433,000.00	45,179,000.00	(2,575,154.94)	(33,816.87)	(2,608,971.81)
			<b>\$ 237,149,000</b>	<b>\$ 226,000,000</b>	<b>\$ (12,869,722)</b>	<b>\$ (168,798)</b>	<b>\$ (13,038,521)</b>



# MONTHLY EXECUTIVE REPORT

## September 30, 2022

### Top 20 Customers



## 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: 1) 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. The 30% design submittal has been presented.
- **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 and Contractor is finished the bypass channel and demolition. Work will continue for the replacement gates, existing aerated channel, and the traveling bridges. Overall construction is approximately 10-percent complete.
- **Large Diameter Sewer Rehabilitation Program**: Every year, MSD experiences multiple sewer failures – 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



## MONTHLY EXECUTIVE REPORT

### September 30, 2022

rehab project will be complete in FY23. Prospect Sewer Rehab 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 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 has received the 30% design submittal for Paddy's Run. Staff continue to coordinate with LG&E regarding the Canal Street Floodwall project and have identified additional work that is required to relocate the floodwall including archeological services.

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:

- Budget Ceiling:** 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 September 30, 2022, the Performance Budget Target is \$191.8M.

FY23 capital expenditures for the Wastewater, Stormwater, and Support Services Programs totaled \$15.0M through September 2022. This spend represents approximately 7.7% of the \$195.4M FY23 capital budget and 7.8% 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	\$195.4M	Approved by MSD Board
<b>FY 2023 Performance Budget Target</b>	<b>\$191.8M</b>	<b>Budget Ceiling minus Mgmt. Reserve</b>
FY 2023 Actuals	\$15.0M	7.67 % 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

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### September 30, 2022

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	
November 2022	\$15.2M	
January 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	
<b>FY23 Performance Budget Target</b>	<b>\$ 190.4M</b>	<b>\$ 15.0M</b>

*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:

- **Initiation/ Procurement Activity:** 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.
- **Construction Activity:** 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	48	\$ 132,925	\$ 12,831,033	\$ (556,575)*
Design	56	\$ 25,376,599	\$ 53,352,208	\$ 2,643,329
Construction	40	\$ 150,668,343	\$ 75,967,208	\$ 3,086,800
Studies	9	\$ 1,228,402	\$ 2,319,140	\$ 112,175
<b>TOTAL</b>	<b>153</b>	<b>\$ 177,406,269</b>	<b>\$ 144,469,589</b>	<b>\$ 5,285,729</b>

\*Negative value due to FY22 accruals

### 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.

## MONTHLY EXECUTIVE REPORT

### September 30, 2022

#### 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
DRG Aeration Basin Sluice Gate Project	G22001	9/22/2021	Pace Contracting, LLC	\$ 153,000
CMF Remediation	G22001	11/11/2021	Brownfields Environmental Consulting	\$ 150,000
Beargrass Pump #3, Bearing Replacement	G22001	1/17/2022	Derby City Pump & Valve Service, Inc.	\$ 150,000
Bar Screen Repair at the SWPS	G22001	1/28/2022	EZ Construction Company	\$ 75,000
15th Street Sewer Repair	A22183	3/7/2022	Temple and Temple	\$ 500,000
SGC Gates Replacement - Construction	H22022	4/1/2022	Pace Contracting, LLC	\$ 2,000,000
W Broadway Sewer Repair	H20147	6/22/2022	Ulliman Schutte	\$ 2,000,000
34th Street CSO	G23029	6/30/2022	Temple and Temple	\$ 1,500,000
26th and Bank Street	G23001	7/21/2022	Seven Seas Construction	\$ 50,000
2218 Dorothy Ave	G23001	8/23/2022	TRC, LLC (WBE)	\$ 50,000

#### 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.
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

## MONTHLY EXECUTIVE REPORT

### September 30, 2022

#### 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 CIP Projects in Design

Budget ID & Project Name	Design Finish	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
D22100 MFWQTC Thermo-hydrolysis	9/19/2023	\$340.5M	\$8.5M	\$6.5M	\$8.5M	60% Design Underway
F18515 Paddy's Run FPS Capacity Upgrade	9/21/2023	\$123.7M	\$7.7M	\$3.3M	\$7.6M	60% design underway. Procurement of the pumps and the early work package has started. WIFIA Letter of Intent is going out
F16004 Canal Street Floodwall	2/2/2023	\$7.5M	\$5.7M	\$0.4M	\$0.5M	Delays by ACOE will push the anticipated bid date

#### 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	\$8.7M	\$11.7M	Equipment has been ordered and on-time deliveries are anticipated
H21019 Rudd Ave Sewer Infrastructure Rehabilitation	1/23/2023	\$14.4M	\$8.2M	\$7.2M	\$7.7M	Construction ongoing for Rudd Slip Lining and Rudd Spot Repairs
D20285 MFWQTC LG Dryer Replacements	1/29/2023	\$70.6M	\$7.0M	\$67.6M	\$7.3M	Startup issues have delayed project completion
H22022 SGC Gate Replacements	9/15/2023	\$8.9M	\$5.9M	\$1.4M	\$5.9M	
G21225 MFWQTC & CMF Facility Guard Building	10/31/2023	\$6.3 M	\$5.1M	\$0.3M	\$3.4M	Construction ongoing

## CIP MANAGEMENT TEAM MEETING HIGHLIGHTS

There was no CIP Management Team Meeting in September.

## 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
460	Padmount Transformer for Battery C	Project Status, Budget	(\$850,000)	Approved
461	Black Pond Creek LOMR	New Project, Budget	\$45,300	Approved
462	1717 Trevilian Way DIP	New Project, Budget	\$70,000	Approved
463	Jefferson County Excess Cost	New Project, Budget	\$240,000	Approved
464	BC Excess Cost	New Project, Budget	\$118,000	Approved
465	Design Manual and Specifications Update	New Project, Budget	\$200,000	Approved
466	Project Management Services	EAC, Budget	(\$55,000)	Approved
467	Leven Pump Station Elimination	Schedule Impact	---	Approved
468	Monticello PS Elimination	Schedule Impact	---	Approved
469	WQTC Regional Lab Upgrades	Schedule Impact	---	Approved
470	Carslaw Court PS Elimination	Project Status, Budget	(\$212,500)	Approved

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September 30, 2022

ID	Project Name	Advisement Category	Impact on FY Budget	Status
471	Lake Forest PS Elimination	Schedule Impact, Budget	(\$458,227)	Approved
472	FY23 LOJIC Survey Control Maintenance	EAC, Budget	\$7,500	Approved
473	Fairmount Road PS Force Main Ext Phase 2	Schedule Impact, Budget	(\$1,000,000)	Approved
474	Project Management Services	EAC	---	Approved
475	Cedar Creek Main Interceptor	Schedule Impact	---	Approved
476	Cedar Creek Main SSES	Schedule Impact	---	Approved
477	Little Cedar Creek Interceptor	Scope, Budget	(\$575,110)	Approved
478	2300 Tidwell Road DIP	New Project, Budget	\$80,000	Approved
479	947 E Madison St	New Project, Budget	\$50,000	Approved
480	DRG Clarifier Mechanisms 4-6	EAC	\$163,540	Approved
481	Ash Avenue Interceptor	EAC	\$1,580,000	Approved
482	Oak Valley Drainage Remedies	EAC	---	Approved
483	FY23 Engr Planning & Reg Com Support	EAC, Budget	\$127,500	Approved

## PROCUREMENT ACTIVITIES

### *Bid Openings*

Bids opened during the reporting month are shown below.

*Bids opened during Reporting Month*

Budget ID	Project Name	Bid Opening	Engineer's Estimate	Bid Award
W21006	Ash Avenue Interceptor Project	9/1/2022	\$7.9M	\$9.1M

**END OF REPORT**