

# Monthly Executive Report

## Financial & Capital Program Updates

As of December 31, 2022



## MONTHLY EXECUTIVE REPORT

### December 31, 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.*

# MONTHLY EXECUTIVE REPORT

## December 31, 2022

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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

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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

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

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

#### FINANCIAL HEALTH

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

*Summary of FY23 Financial Performance Year-To-Date*

Description	Status as of December 31, 2022
Operating Revenues	Total Operating Revenues are \$2.7M favorable to budget year-to-date. Wastewater service charges account for \$2.3M of this budget variance.
Operating Expenses	Total Operating Expenses are \$8.1M favorable to budget year-to-date. Salaries and labor-related overhead account for \$4M of the savings to budget. Contract Services and Chemicals make up the majority of the remainder.
Interest Expense	Total Interest Expense is \$5.2M favorable to budget year-to-date. This savings is being driven by lower swap interest payments as a result of favorable interest rates.
Statement of Cash Flows	Cash and cash equivalents increased \$7.7 million in December. Net cash provided by operating activities increased \$24.2 million. Net cash used by capital-related financing activities was \$16 million primarily to fund construction in process. Net cash used in investing activities was \$480 thousand.

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

### CAPITAL PROGRAM HEALTH

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

*Summary of FY23 Capital Program Performance To-date*

Key Programs and Initiatives	Status as of December 31, 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	Six (6) emergency projects started in the reporting period. Emergencies include a Floodwall closure repair at Mellwood, replacement of existing MCC's at 5 <sup>th</sup> St. FPS, new doors for the MFWQTC MEB East & West Freight Elevators, PSC repair in right of way (ROW) at 7309 Ethan Allen Way, repair failed effluent line at SORF, and the construction of lateral extension at the Blue Lick Road Bus Compound. The estimated costs are \$1.25M.
Cashflow Performance*	Budget Performance Target is \$191.8M as of December 31, 2022. The FY23 Spending Projection is 185.0M
Change Management Notice of Advisements (NOAs)	Thirteen (13) NOAs were processed this month in the following advisement categories: Nine (9) new projects, two (2) EAC increase, three (3) budget impact, four (4) schedule impact, one (1) Construction Advancement, one (1) project name change. Note: A NOA can have more than one advisement category.

\*Discussion on Performance Target and Budget Ceiling is found in the Capital Program Performance Section

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

## DECEMBER FINANCIAL SUMMARY

### Financial Highlights for the month of December 2022

- Total operating revenues were \$893 thousand unfavorable to budget
- Service and administrative expenses were \$1.5 million favorable to budget

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

Total operating revenues were \$893 thousand unfavorable to budget and \$255 thousand more than December 2021. Wastewater service charges were \$44 thousand unfavorable to budget and \$269 thousand less than December 2021. Drainage service charges were \$758 thousand unfavorable to budget and \$523 thousand more than December 2021. Other operating revenues were \$91 thousand unfavorable to budget and \$1.2 thousand more than December 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 was offset by 4 billing cycles of customers that typically bill on the last day of the month that billed on the first business day of January. Year to date, total operating revenues were \$2.7 million favorable to budget (wastewater service charges \$2.3 million, drainage service charges (\$577) thousand and other operating income \$941 thousand). Wastewater service charges are being driven by the commercial customer class which account for \$2.1 million of the \$2.7 million budget variance, primarily due to higher billed volume charges.

Service and administrative expenses were \$1.5 million favorable to budget and \$364 thousand less than December 2021. Year to date, service and administrative expenses were \$8.1 million favorable to budget. Salaries and Labor Related Overhead account for \$4 million of the savings to budget. Contract Services and Chemicals make up most of the remaining budget savings.

Depreciation and amortization expenses were \$316 thousand unfavorable to budget and \$701 thousand more than December 2021. Year to date, depreciation and amortization expenses were \$2.3 million unfavorable to budget. Depreciation expense is being driven by the large number of capital projects that were placed in service in June of 2022 including the Waterway Protection Tunnel.

Investment income was \$960 thousand favorable to budget and \$1.9 million more than December 2021. Year to date, investment income was \$2.1 million favorable to budget.

Interest expense was \$946 thousand favorable to budget and \$377 thousand less than December 2021. Year to date, interest expense was \$5.2 million favorable to budget. Interest expense savings are being driven by lower swap payments.

### Statement of Cash Flows

Cash and cash equivalents increased \$7.7 million in December. Net cash provided by operating activities increased \$24.2 million. Net cash used by capital-related financing activities was \$16 million primarily to fund construction in process. Net cash used in investing activities was \$480 thousand.



# MONTHLY EXECUTIVE REPORT

## December 31, 2022

### FINANCIAL STATEMENTS – FY23

#### Comparative Statement of Net Position

Louisville & Jefferson County Metropolitan Sewer District				
Monthly Comparative Statement of Net Position				
For the Month Ended, December 31, 2022				
	YTD Dec-2022	YTD Dec-2021	Variance	Percent
<b>Current Assets</b>				
Unrestricted Cash & Cash Equivalents	\$131,628,418	\$112,240,483	\$19,387,935	17.27%
Sewer & Drainage Receivable	23,563,193	27,195,538	(3,632,345)	-13.36%
Assessment Warrants Receivable	167,578	207,519	(39,942)	-19.25%
Miscellaneous Receivables	(1,049,285)	(1,853,978)	804,693	-43.40%
Inventories	5,711,776	5,268,955	442,821	8.40%
Prepaid Expenses	5,751,320	6,317,429	(566,109)	-8.96%
Restricted Funds	131,719,142	115,453,635	16,265,508	14.09%
Accrued Interest Receivable	340,553	231,208	109,345	47.29%
<b>Total Current Assets</b>	<b>297,832,695</b>	<b>265,060,789</b>	<b>32,771,906</b>	<b>12.36%</b>
<b>Non-Current Assets</b>				
Utility Plant in Service	4,737,663,370	4,308,300,834	429,362,536	9.97%
Accumulated Depreciation	(1,622,494,994)	(1,514,862,054)	(107,632,939)	7.11%
Construction in Progress	493,163,674	683,509,498	(190,345,824)	-27.85%
<b>Net Fixed Assets</b>	<b>3,608,332,051</b>	<b>3,476,948,278</b>	<b>131,383,773</b>	<b>3.78%</b>
<b>Non-Current Receivables</b>	<b>21,647,309</b>	<b>25,310,051</b>	<b>(3,662,742)</b>	<b>-14.47%</b>
<b>Total Assets</b>	<b>3,927,812,054</b>	<b>3,767,319,118</b>	<b>160,492,937</b>	<b>4.26%</b>
<b>Total Deferred Outflow of Resources</b>	<b>70,205,893</b>	<b>82,794,374</b>	<b>(12,588,482)</b>	<b>-15.20%</b>
<b>Total Assets &amp; Deferred Outflow of Resources</b>	<b>3,998,017,947</b>	<b>3,850,113,492</b>	<b>147,904,455</b>	<b>3.84%</b>
<b>Current Liabilities</b>				
Miscellaneous Accounts Payable	6,225,933	7,788,924	(1,562,991)	-20.07%
Accounts Payable - Construction	5,316,696	2,685,974	2,630,722	97.94%
Contract Retainage	5,629,929	11,668,048	(6,038,119)	-51.75%
Accrued Interest Payable	13,621,447	12,802,819	818,628	6.39%
Current Maturities of Bonds Payable	52,880,000	51,230,000	1,650,000	3.22%
Current Maturities of Subordinate Debt	2,589,874	1,913,036	676,838	35.38%
Deposits Payable	2,085,907	2,627,338	(541,430)	-20.61%
Accrued Salaries & Wages	1,447,155	1,339,400	107,755	8.05%
Accrued Workers' Comp Insurance	1,512,835	2,455,512	(942,677)	-38.39%
Employee Comp Absences Payable	4,822,460	3,970,778	851,682	21.45%
<b>Total Current Liabilities</b>	<b>96,132,237</b>	<b>98,481,828</b>	<b>(2,349,591)</b>	<b>-2.39%</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	375,020,628	474,924,813	(99,904,185)	-21.04%
Other Long-Term Liability	289,299,269	321,078,985	(31,779,716)	-9.90%
<b>Total Non-Current Liabilities</b>	<b>2,892,724,897</b>	<b>2,852,538,798</b>	<b>40,186,099</b>	<b>1.41%</b>
<b>Total Liabilities</b>	<b>2,988,857,135</b>	<b>2,951,020,626</b>	<b>37,836,508</b>	<b>1.28%</b>
<b>Total Deferred Inflow of Resources</b>	<b>54,328,078</b>	<b>10,041,194</b>	<b>44,286,884</b>	<b>441.05%</b>
<b>Total Liabilities &amp; Deferred Inflow of Resources</b>	<b>3,043,185,212</b>	<b>2,961,061,820</b>	<b>82,123,392</b>	<b>2.77%</b>
<b>Net Position</b>	<b>954,832,734</b>	<b>889,051,672</b>	<b>65,781,063</b>	<b>7.40%</b>
<b>Total Liabilities, Deferred Inflow of Resources and Net Position</b>	<b>3,998,017,947</b>	<b>3,850,113,492</b>	<b>147,904,455</b>	<b>3.84%</b>

# MONTHLY EXECUTIVE REPORT

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

Louisville & Jefferson County Metropolitan Sewer District							
Monthly Statement of Revenues, Expenses, and Changes in Net Position							
For the Month Ended, December 31, 2022							
	YTD Actual	YTD Budget	YTD Variance	% YTD Variance	YTD Prior Year	YTD Variance	% YTD Variance
<b>Wastewater Charges</b>							
Residential	\$ 83,021,249	\$ 83,288,564	\$ (267,315)	-0.3%	\$ 80,277,921	\$ 2,743,328	3.4%
Commercial	47,541,693	45,391,785	2,149,908	4.7%	44,282,552	3,259,141	7.4%
Industrial	12,355,581	12,138,356	217,225	1.8%	11,627,535	728,046	6.3%
Other Wastewater	5,765,514	4,416,905	1,348,609	30.5%	4,608,883	1,156,630	25.1%
Free Wastewater Charges	(3,523,118)	(2,457,059)	(1,066,059)	43.4%	(2,873,502)	(649,616)	22.6%
<b>Total Wastewater Charges</b>	<b>145,160,919</b>	<b>142,778,551</b>	<b>2,382,368</b>	<b>1.7%</b>	<b>137,923,389</b>	<b>7,237,530</b>	<b>5.2%</b>
<b>Drainage</b>							
Residential	16,826,077	16,847,133	(21,056)	-0.1%	15,892,928	933,149	5.9%
Commercial	25,664,969	26,386,392	(721,423)	-2.7%	24,277,715	1,387,254	5.7%
Industrial	3,062,212	2,988,688	73,524	2.5%	2,819,410	242,802	8.6%
Other Stormwater	2,143,269	1,945,912	197,357	10.1%	1,887,895	255,374	13.5%
Free Stormwater Charges	(1,447,760)	(1,341,532)	(106,228)	7.9%	(1,366,666)	(81,094)	5.9%
<b>Total Drainage Charges</b>	<b>46,248,767</b>	<b>46,826,593</b>	<b>(577,826)</b>	<b>-1.2%</b>	<b>43,511,282</b>	<b>2,737,485</b>	<b>6.3%</b>
<b>Total Service Charges</b>	<b>191,409,686</b>	<b>189,605,144</b>	<b>1,804,542</b>	<b>1.0%</b>	<b>181,434,671</b>	<b>9,975,015</b>	<b>5.5%</b>
<b>Other Operating Income</b>	<b>3,173,049</b>	<b>2,277,560</b>	<b>895,489</b>	<b>39.3%</b>	<b>3,758,658</b>	<b>(585,609)</b>	<b>-15.6%</b>
<b>Total Operating Revenue</b>	<b>194,582,735</b>	<b>191,882,705</b>	<b>2,700,030</b>	<b>1.4%</b>	<b>185,193,328</b>	<b>9,389,407</b>	<b>5.1%</b>
<b>Operating Expenses</b>							
Salaries & Wages	28,579,755	31,130,783	(2,551,028)	-8.2%	26,536,868	2,042,887	7.7%
Labor Related Overhead	12,948,784	14,435,300	(1,486,516)	-10.3%	12,590,512	358,271	2.8%
Utilities	8,396,134	8,413,133	(16,999)	-0.2%	7,249,984	1,146,150	15.8%
Materials & Supplies	4,230,814	4,461,841	(231,027)	-5.2%	3,564,196	666,619	18.7%
Contractual Services	15,542,377	18,245,873	(2,703,496)	-14.8%	17,509,024	(1,966,647)	-11.2%
Chemicals	3,212,113	4,627,460	(1,415,347)	-30.6%	3,019,528	192,585	6.4%
Fuel	883,705	1,054,904	(171,199)	-16.2%	689,285	194,420	28.2%
Insurance Premiums & Claims	3,558,292	3,138,723	419,569	13.4%	2,984,435	573,857	19.2%
Bad Debt	2,069,608	1,767,650	301,958	17.1%	2,314,416	(244,808)	-10.6%
Other Operating Expense	1,007,032	1,287,118	(280,086)	-21.8%	689,769	317,262	46.0%
Mapping/Insurance Recovery	-	-	-	0.0%	-	0	0.0%
Capitalized Overhead	(19,823,833)	(21,255,068)	1,431,235	-6.7%	(18,878,860)	(944,973)	5.0%
Capital Expenses (over)/under applied							
<b>Net Service and Administrative Costs</b>	<b>60,604,781</b>	<b>67,307,717</b>	<b>(6,702,936)</b>	<b>-10.0%</b>	<b>58,269,157</b>	<b>2,335,624</b>	<b>4.0%</b>
Depreciation	54,084,101	51,730,002	2,354,099	4.6%	49,124,575	4,959,526	10.1%
Amortization	782,744	873,861	(91,116)	-10.4%	624,290	158,454	25.4%
<b>Total Depreciation/Amortization</b>	<b>54,866,846</b>	<b>52,603,863</b>	<b>2,262,983</b>	<b>4.3%</b>	<b>49,748,865</b>	<b>5,117,980</b>	<b>10.3%</b>
<b>Total Operating Expenses</b>	<b>115,471,626</b>	<b>119,911,580</b>	<b>(4,439,954)</b>	<b>-3.7%</b>	<b>108,018,022</b>	<b>7,453,604</b>	<b>6.9%</b>
<b>Net Operating Income</b>	<b>79,111,109</b>	<b>71,971,125</b>	<b>7,139,984</b>	<b>9.9%</b>	<b>77,175,306</b>	<b>1,935,803</b>	<b>2.5%</b>
<b>Non-Operating Revenue (Expenses)</b>							
Gain/Loss Disposal of Assets	(737,011)	600	(737,611)	-122935.1%	125,827	(862,838)	-685.7%
Investment Income	7,868,207	5,762,400	2,105,807	36.5%	5,599,514	2,268,693	40.5%
Interest Expense	(46,021,088)	(51,282,043)	5,260,955	-10.3%	(45,725,742)	(295,346)	0.6%
<b>Total Non-Operating Revenue (Expenses)</b>	<b>(38,889,892)</b>	<b>(45,519,043)</b>	<b>6,629,151</b>	<b>-14.6%</b>	<b>(40,000,401)</b>	<b>1,110,509</b>	<b>-2.8%</b>
Contributions	203,194.60	-	203,195	0.0%	51,895	(151,300)	291.6%
<b>Change in Net Position Before Swaps</b>	<b>40,424,412</b>	<b>26,452,082</b>	<b>13,972,330</b>	<b>52.8%</b>	<b>37,226,800</b>	<b>(3,197,612)</b>	<b>8.6%</b>
<b>Change in Fair Value of Swaps</b>	<b>(8,632,006)</b>	<b>-</b>	<b>(8,632,006)</b>	<b>0.0%</b>	<b>4,059,253</b>	<b>12,691,259</b>	<b>-312.7%</b>
<b>Change in Net Position After Swaps</b>	<b>\$ 31,792,406</b>	<b>\$ 26,452,082</b>	<b>\$ 5,340,324</b>	<b>20.2%</b>	<b>\$ 41,286,053</b>	<b>\$ 9,493,648</b>	<b>-23.0%</b>

# MONTHLY EXECUTIVE REPORT

## December 31, 2022

### Statement of Cash Flows

Louisville and Jefferson County Metropolitan Sewer District Statement of Cash Flows For the Month Ended, December 31, 2022		
	FY 2023 YTD	FY 2022 YTD
<b>Cash Flows from Operating Activities</b>		
Cash received from customers	\$ 198,296,421	\$ 184,248,002
Cash paid to suppliers	(39,133,462)	(42,804,161)
Cash paid to employees	(31,101,438)	(29,354,847)
<b>Net Cash Provided by Operating Activities</b>	<b>128,061,521</b>	<b>112,088,994</b>
<b>Cash Flows from Capital and Related Financing Activities</b>		
Proceeds from issuance of revenue bonds	-	-
Proceeds from issuance of bond anticipation note	229,468,019	232,924,231
Proceeds from issuance of commercial paper	190,000,000	255,000,000
Proceeds from issuance of notes	-	-
Proceeds from issuance of other subordinated debt	-	-
Payments for retirement of revenue bonds	-	(3,577,297)
Payments for retirement of bond anticipation note	(226,340,000)	(226,340,000)
Payments for retirement of commercial paper	(140,000,000)	(200,000,000)
Payments for retirement of notes	-	-
Payments for retirement of other subordinated debt	(1,504,548)	(1,246,049)
Payments for interest expense	(55,620,911)	(55,175,835)
Payments for interest on swaps	(2,667,453)	(5,143,870)
Build America bond interest subsidy	5,493,075	5,164,237
Proceeds from capital grants	-	-
Proceeds from sale of capital assets	(737,011)	125,827
Payments for capital assets	(98,046,194)	(98,428,076)
Proceeds from assessments	432,716	630,617
<b>Net Cash Provided (Used) by Capital and Related Financing</b>	<b>(99,522,307)</b>	<b>(96,066,215)</b>
<b>Cash Flows from Investing Activities</b>		
Purchase of investments	(74,740,357)	(71,425,123)
Maturity of investments	58,890,948	36,293,794
Investment income	(748,543)	1,060,450
<b>Net Cash Provided (Used) by Investing Activities</b>	<b>(16,597,952)</b>	<b>(34,070,879)</b>
Net Increase (Decrease) in Cash and Cash Equivalents	11,941,262	(18,048,100)
Cash and Cash Equivalents, Beginning of Year	71,854,355	101,985,796
<b>Cash and Cash Equivalents, End of Year</b>	<b>\$ 83,795,617</b>	<b>\$ 83,937,696</b>
<b>Reconciliation of Operating Income to Net Cash provided by Operating Activities</b>		
Income from operations	\$ 79,110,832	\$ 77,175,306
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation and amortization	54,866,846	49,748,865
Accounts receivable	3,547,882	(816,047)
Inventories	(449,495)	(182,867)
Prepaid expense	(2,802,248)	(161,901)
Accounts payable	(3,572,504)	(10,556,498)
Customer deposits	165,805	(129,279)
Accrued liabilities	(2,805,597)	(2,988,585)
Pension liability	-	-
OPEB liability	-	-
<b>Net Cash Provided by Operating Activities</b>	<b>\$ 128,061,521</b>	<b>\$ 112,088,994</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	10,946,625	(14,354,022)
Change in fair value of investments	(463,715)	274,932
Decrease in interest rate swap deferred revenue	(248,475)	(248,475)
Change in fair value - swap agreements	(8,632,006)	4,059,253
Bonds issued for refunding of debt	-	246,555,000

# MONTHLY EXECUTIVE REPORT

## December 31, 2022

### Actual vs. Budget Operating and Maintenance Expenses

Louisville & Jefferson County Metropolitan Sewer District Operating and Maintenance Expenses For the Month Ended, December 31, 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	\$ 22,694,221	\$ 29,815,246	\$ (7,121,025)	-23.9%	\$ 21,365,013	\$ 1,329,208	6.2%	
51130 - Overtime	1,320,156	1,119,392	200,764	17.9%	1,073,594	246,561	23.0%	
51135 - Special Event Compensation	71,610	181,862	(110,252)	-60.6%	72,750	(1,140)	-1.6%	
51140 - Wages pd for vacation, holidays & other	4,472,360	0	4,472,360	0.0%	4,009,372	462,988	11.5%	
51145 - Incentive Pay - Performance, ERT, Sugg	12,334	0	12,334	0.0%	7,814	4,519	57.8%	
51147 - Service & Safety Incentive Awards	9,075	14,284	(5,209)	-36.5%	8,325	750	9.0%	
<b>Total Salaries &amp; Wages</b>	<b>28,579,755</b>	<b>31,130,783</b>	<b>(2,551,028)</b>	<b>-8.2%</b>	<b>26,536,868</b>	<b>2,042,887</b>	<b>7.7%</b>	
<b>Labor &amp; Related Overhead</b>								
51210 - Short-Term Disability	133,786	0	133,786	0.0%	196,716	(62,930)	-32.0%	
51220 - Workers' Compensation Insurance	55,942	162,504	(106,562)	-65.6%	127,017	(71,075)	-56.0%	
51225 - Workers' Compensation Claims	126,821	596,305	(469,483)	-78.7%	144,068	(17,247)	-12.0%	
51230 - Long-Term Disability	(17,850)	25,200	(43,050)	-170.8%	(21,857)	4,007	-18.3%	
51240 - Group Life - AD&D Insurance	48,913	19,800	29,113	147.0%	36,739	12,175	33.1%	
51250 - Tuition Assistance	(7,802)	34,998	(42,800)	-122.3%	28,657	(36,459)	-127.2%	
51260 - Empl Assistance & Wellness Program	1,226	7,002	(5,776)	-82.5%	6,914	(5,688)	-82.3%	
51300 - Payroll Taxes	2,003,999	2,203,808	(199,808)	-9.1%	1,702,047	301,953	17.7%	
51400 - Unemployment Insurance	6,800	16,642	(9,842)	-59.1%	(35,776)	42,576	-119.0%	
51500 - Med Ins: MSD's port. of prem for grp	3,384,879	3,787,578	(402,700)	-10.6%	3,365,000	19,878	0.6%	
51600 - Retirement Contributions	7,212,069	7,581,463	(369,394)	-4.9%	7,040,987	171,082	2.4%	
<b>Total Labor &amp; Related Overhead</b>	<b>12,948,784</b>	<b>14,435,300</b>	<b>(1,486,516)</b>	<b>-10.3%</b>	<b>12,590,512</b>	<b>358,271</b>	<b>2.8%</b>	
<b>Utilities</b>								
53310 - Electric	6,094,575	6,350,410	(255,835)	-4.0%	5,697,821	396,754	7.0%	
53320 - Natural Gas	596,572	500,466	96,106	19.2%	244,393	352,179	144.1%	
53330 - Water	991,373	721,757	269,616	37.4%	628,569	362,805	57.7%	
53340 - Telephone	150,771	156,500	(5,729)	-3.7%	128,783	21,988	17.1%	
53345 - Data Communications	562,843	684,000	(121,157)	-17.7%	550,419	(121,157)	2.3%	
<b>Total Utilities</b>	<b>8,396,134</b>	<b>8,413,133</b>	<b>(17,000)</b>	<b>-0.2%</b>	<b>7,249,984</b>	<b>1,012,568</b>	<b>15.8%</b>	
<b>Materials &amp; Supplies</b>								
53100 - Tires & Tire Service Expense	157,340	168,524	(11,184)	-6.6%	0	157,340	0.0%	
53140 - Materials & Supplies	3,932,353	4,104,317	(171,964)	-4.2%	3,391,540	540,813	15.9%	
53160 - Landfill Cost of fill dirt	141,121	189,000	(47,879)	-25.3%	172,656	(31,535)	-18.3%	
<b>Total Materials &amp; Supplies</b>	<b>4,230,814</b>	<b>4,461,841</b>	<b>(231,027)</b>	<b>-5.2%</b>	<b>3,564,196</b>	<b>666,619</b>	<b>18.7%</b>	
<b>Contractual Services</b>								
51700 - Uniforms	130,477	159,730	(29,253)	-18.3%	116,668	13,809	11.8%	
52110 - Billing & Collection	3,417,213	3,368,802	48,411	1.4%	3,135,074	282,138	9.0%	
52130 - Custodial & Watchmen	413,578	421,302	(7,724)	-1.8%	265,517	148,061	55.8%	
52140 - Professional Services	1,147,166	2,153,866	(1,006,700)	-46.7%	1,218,505	(71,340)	-5.9%	
52145 - Legal	173,177	635,321	(462,144)	-72.7%	243,938	(70,761)	-29.0%	
52155 - Banking Services	27,986	28,800	(814)	-2.8%	17,464	10,522	60.2%	
52160 - Maintenance & Repairs	2,920,501	3,056,056	(135,555)	-4.4%	2,511,171	409,330	16.3%	
52170 - Sludge & Grit Disposal	1,144,745	1,493,387	(348,641)	-23.3%	2,998,782	(1,854,037)	-61.8%	
52180 - Temporary Services	40,369	122,750	(82,381)	-67.1%	95,284	(54,915)	-57.6%	
52195 - Other Contractual Services	6,127,167	6,805,861	(678,694)	-10.0%	6,906,620	(779,454)	-11.3%	
<b>Total Contractual Services</b>	<b>15,542,377</b>	<b>18,245,873</b>	<b>(2,703,496)</b>	<b>-14.8%</b>	<b>17,509,024</b>	<b>(1,966,647)</b>	<b>-11.2%</b>	
<b>Bad Debt</b>								
54200 - Bad Debts	1,919,608	1,767,650	151,958	8.6%	2,014,416	(94,808)	-4.7%	
54210 - Bad Debt - Assessments	150,000	0	150,000	0.0%	300,000	(150,000)	-50.0%	
<b>Total Bad Debt</b>	<b>2,069,608</b>	<b>1,767,650</b>	<b>301,958</b>	<b>17.1%</b>	<b>2,314,416</b>	<b>(244,808)</b>	<b>-10.6%</b>	
<b>Chemicals</b>								
53205 - Peracetic Acid	0	100,000	(100,000)	0.0%	0	0	0.0%	
53210 - Chlorine	0	4,725	(4,725)	0.0%	0	0	0.0%	
53215 - Sodium Hypochlorite	899,343	1,127,053	(227,710)	-20.2%	425,118	474,225	111.6%	
53220 - Polymer	1,215,314	1,950,844	(735,530)	-37.7%	1,537,336	(322,022)	-20.9%	
53225 - Sodium Aluminate	77,070	215,616	(138,546)	-64.3%	107,446	(30,376)	-28.3%	
53230 - Liquid Oxygen	117,841	164,258	(46,417)	-28.3%	99,620	18,221	18.3%	
53235 - Liquid Nitrogen	28,253	44,292	(16,039)	-36.2%	1,384	26,869	1941.4%	
53240 - Other Chemicals	6,699	26,553	(19,854)	-74.8%	49,676	(42,977)	-86.5%	
53250 - Dechlorination	157,465	373,886	(216,421)	-57.9%	181,916	(24,452)	-13.4%	
53275 - Defoamer	0	19,858	(19,858)	0.0%	0	0	0.0%	
53280 - Bioxide	710,128	600,000	110,128	18.4%	617,031	93,096	15.1%	
53285 - Sodium Hydroxide	0	375	(375)	0.0%	0	0	0.0%	
<b>Total Chemicals</b>	<b>3,212,113</b>	<b>4,627,460</b>	<b>(1,415,347)</b>	<b>-30.6%</b>	<b>3,019,528</b>	<b>192,585</b>	<b>6.4%</b>	
<b>Fuel</b>								
53120 - Gasoline	376,135	432,000	(55,865)	-12.9%	299,083	77,052	25.8%	
53130 - Diesel Fuel	507,570	622,904	(115,334)	-18.5%	390,202	117,369	30.1%	
<b>Total Fuel</b>	<b>883,705</b>	<b>1,054,904</b>	<b>(171,199)</b>	<b>-16.2%</b>	<b>689,285</b>	<b>194,420</b>	<b>28.2%</b>	
<b>Insurance Premiums &amp; Claims</b>								
54110 - General Liability Insurance	2,095,075	1,846,134	248,941	13.5%	1,701,892	393,183	23.1%	
54130 - Property Insurance	1,105,660	1,013,964	91,696	9.0%	1,013,966	91,694	9.0%	
54140 - General Liability Claims	357,557	278,625	78,932	28.3%	268,577	88,980	33.1%	
<b>Total Insurance Premiums &amp; Claims</b>	<b>3,558,292</b>	<b>3,138,723</b>	<b>419,569</b>	<b>13.4%</b>	<b>2,984,435</b>	<b>573,857</b>	<b>19.2%</b>	
<b>Other Operating Expense</b>								
53410 - Equipment Rental	163,188	100,413	62,775	62.5%	125,815	37,373	29.7%	
53420 - Space Rent	15,000	15,000	0	0.0%	15,000	0	0.0%	
53430 - Leased Parking	34,972	39,770	(4,798)	-12.1%	1,050	33,922	3230.7%	
54250 - Contributions	207,819	249,000	(41,181)	-16.5%	218,716	(10,897)	-5.0%	
54300 - Fines, Penalties & Damages	0	0	0	0.0%	16,987	(16,987)	0.0%	
54400 - Advertising	15,188	75,152	(59,964)	-79.8%	13,876	1,313	9.5%	
54500 - Travel & Meetings	135,400	240,502	(105,102)	-43.7%	34,094	101,306	297.1%	
54550 - Training	112,173	291,509	(179,336)	-61.5%	60,038	52,135	86.8%	
54600 - Dues, Fees and Subscriptions	316,603	268,572	48,031	17.9%	199,438	117,165	58.7%	
54700 - Board Members	4,250	7,200	(2,950)	-41.0%	5,600	(1,350)	-24.1%	
55555 - Over/under payments	2,439	0	2,439	0.0%	(844)	3,282	-389.0%	
<b>Total Other Operating Expense</b>	<b>1,007,032</b>	<b>1,287,118</b>	<b>(280,086)</b>	<b>-21.8%</b>	<b>689,769</b>	<b>317,262</b>	<b>46.0%</b>	
<b>Grand Total</b>	<b>80,428,614</b>	<b>88,562,785</b>	<b>(8,134,171)</b>	<b>-9.2%</b>	<b>77,148,017</b>	<b>3,147,015</b>	<b>4.3%</b>	

# MONTHLY EXECUTIVE REPORT

## December 31, 2022

### SUPPLEMENTAL FINANCIAL REPORTING

#### Revenue by Customer Class

	Number of Customers		Revenue by Customer Class		Budget By Customer Class	
	Dec-2022	Dec-2021	Dec-2022	Dec-2021	Dec-2022	Dec-2021
<b>Wastewater</b>						
Residential	235,784	234,185	13,491,415	14,113,454	13,467,468	13,238,513
Commercial	21,922	21,821	6,474,687	6,115,793	6,426,005	5,704,384
Industrial	393	393	1,895,613	1,963,802	2,054,761	2,008,279
<b>Sub-Total</b>	<b>258,099</b>	<b>256,399</b>	<b>21,861,715</b>	<b>22,193,049</b>	<b>21,948,234</b>	<b>20,951,177</b>
<b>Drainage</b>						
Residential	209,633	208,818	2,970,142	2,989,710	3,169,211	2,928,390
Commercial	14,000	14,044	4,377,081	3,922,672	4,982,507	3,982,253
Industrial	278	270	543,924	489,336	518,716	450,695
<b>Sub-Total</b>	<b>223,911</b>	<b>223,132</b>	<b>7,891,147</b>	<b>7,401,718</b>	<b>8,670,434</b>	<b>7,361,338</b>
<b>Grand Total</b>			<b>\$ 29,752,862</b>	<b>\$ 29,594,767</b>	<b>\$ 30,618,668</b>	<b>\$ 28,312,514</b>

#### Wastewater Revenue by County

	Number of Customers		Revenue by Customer Class		Budget by Customer Class	
	Dec-2022	Dec-2021	Dec-2022	Dec-2021	Dec-2022	Dec-2021
<b>Jefferson County</b>						
Residential	224,374	224,069	12,761,223	13,230,664	12,760,398	12,504,820
Commercial	21,483	21,464	6,362,521	5,973,274	6,297,366	5,625,784
Industrial	391	391	1,893,800	1,961,950	2,052,315	2,008,189
<b>Sub-Total</b>	<b>246,248</b>	<b>245,924</b>	<b>21,017,544</b>	<b>21,165,889</b>	<b>21,110,079</b>	<b>20,138,794</b>
<b>Bullitt County</b>						
Residential	4,559	3,785	229,271	177,408	221,693	231,693
Commercial	163	116	69,175	76,798	78,846	26,000
Industrial	1	1	1,723	1,671	2,356	-
<b>Sub-Total</b>	<b>4,723</b>	<b>3,902</b>	<b>300,168</b>	<b>255,876</b>	<b>302,895</b>	<b>257,693</b>
<b>Oldham County</b>						
Residential	6,851	6,331	500,921	705,382	485,377	502,000
Commercial	276	241	42,991	65,721	49,793	52,600
Industrial	1	1	90	180	90	90
<b>Sub-Total</b>	<b>7,128</b>	<b>6,573</b>	<b>544,003</b>	<b>771,284</b>	<b>535,260</b>	<b>554,690</b>
<b>Grand Total</b>			<b>\$ 21,861,715</b>	<b>\$ 22,193,049</b>	<b>\$ 21,948,234</b>	<b>\$ 20,951,177</b>

## MONTHLY EXECUTIVE REPORT

### December 31, 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 December 31, 2022.

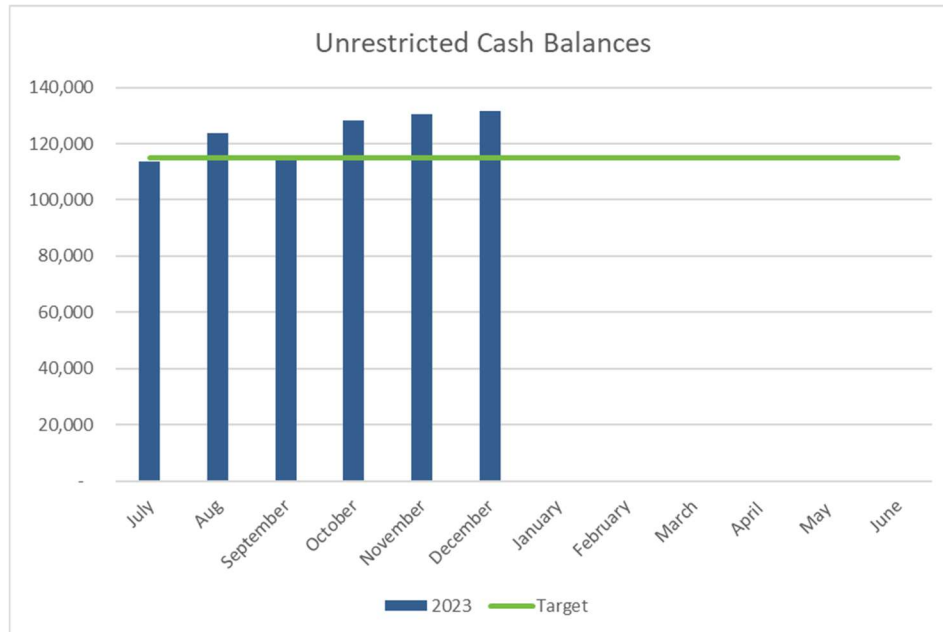
FY23 Headcount by Division			
	Budget Approved	Current Authorized	Filled
Administration			
Community Benefits & Partnerships	5	8	5
Customer Relations	22	22	17
Executive Offices	3	2	2
Government & Public Affairs	6	6	5
Innovation	3	3	3
Internal Audit	4	4	3
Records and Information Governance	9	9	8
Corporate	1	1	1
Engineering	101	99	84
Facilities, Safety & Security	30	32	27
Finance	19	19	16
Human Resources	21	21	18
Information Technology	32	32	27
Legal	12	10	8
Operations	502	502	412
Supply Chain & Economic Inclusion	27	26	23
Total Authorized Positions	797	796	659
*Excludes temporary & seasonal staff			

## MONTHLY EXECUTIVE REPORT

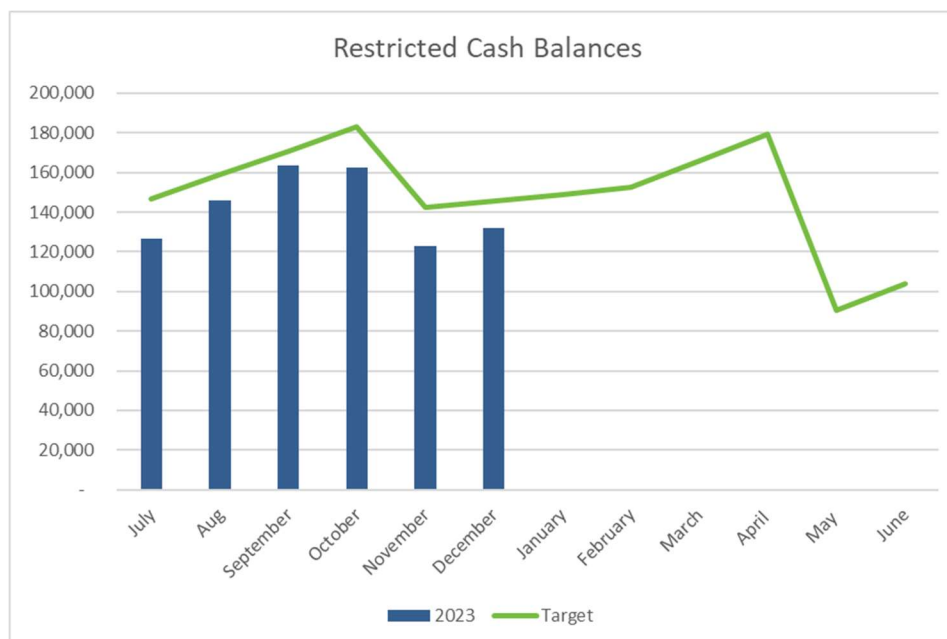
### December 31, 2022

#### 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.





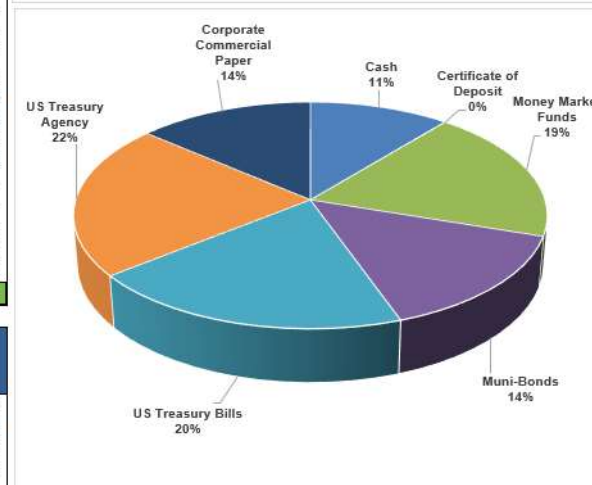
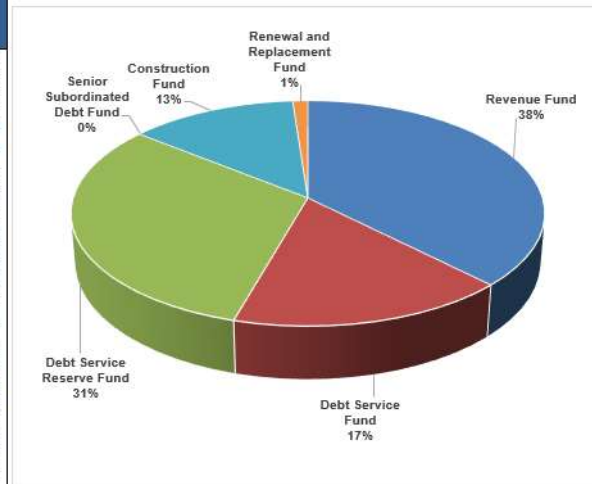
# MONTHLY EXECUTIVE REPORT

## December 31, 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	-	-	948,036	-	-	-	948,036
2009A	-	-	4,334,932	-	-	-	4,334,932
2009B	-	-	13,442,942	-	-	-	13,442,942
2009C	-	1,490,585	13,103,159	-	-	-	14,593,744
2010A	-	1,836,644	17,381,711	-	-	-	19,218,354
2013A	-	441,913	27,431,398	-	-	-	27,873,311
2013B	-	1,471,368	-	-	-	-	1,471,368
2013C	-	74,172	97,741	-	-	-	171,913
2014A	-	347,214	-	-	-	-	347,214
2015A	-	986,743	151,610	-	-	-	1,138,354
2015B	-	2,020,124	-	-	-	-	2,020,124
2016A	-	1,027,191	-	-	-	-	1,027,191
2016B	-	1,339,425	-	-	-	-	1,339,425
2016C	-	7,834,445	-	-	-	-	7,834,445
2017A	-	4,286,345	1,475,589	-	-	-	5,761,934
2017B	-	701,910	-	-	-	-	701,910
2018A	-	235,010	-	-	-	-	235,010
2019A	-	5,600,956	-	-	-	-	5,600,956
2020A	-	1,136,497	2,156,321	-	-	-	3,292,817
2020C	-	905,961	-	-	-	-	905,961
2021A	-	7,949,813	-	-	-	-	7,949,813
2022A	-	1,813,704	-	-	33,473,992	-	35,287,696
2021 BAN	-	-	-	-	-	-	-
2022 BAN	-	1,726,526	-	-	-	-	1,726,526
Renewal & Replacement	-	-	-	-	-	3,017,650	3,017,650
CP 2018 A-1 & A-2	-	-	-	-	6,604	-	6,604
Cash	27,982,992	-	-	-	-	-	27,982,992
Certificate of Deposit	100,000	-	-	-	-	-	100,000
Money Market Funds	177,087	-	-	-	-	-	177,087
Muni-Bonds	-	-	-	-	-	-	-
US Treasury Bills	27,526,097	-	-	-	-	-	27,526,097
US Treasury Agency	17,904,782	-	-	-	-	-	17,904,782
Corporate Commercial Paper	22,797,996	-	-	-	-	-	22,797,996
	<b>\$96,488,954</b>	<b>\$43,226,546</b>	<b>\$80,523,438</b>	<b>\$-</b>	<b>\$33,480,596</b>	<b>\$3,017,650</b>	<b>\$256,737,183</b>



Asset Description	Revenue Fund	Debt Service Fund	Debt Service Reserve Fund	Senior Subordinated Debt Fund	Construction Fund	Renewal and Replacement Fund	Total
Cash	27,982,992	-	-	-	-	-	27,982,992
Certificate of Deposit	100,000	-	-	-	-	-	100,000
Money Market Funds	177,087	43,226,546	2,213,051	-	3,577,007	11,056	49,204,747
Muni-Bonds	-	-	37,124,097	-	-	-	37,124,097
US Treasury Bills	27,526,097	-	-	-	19,961,759	3,006,594	50,494,450
US Treasury Agency	17,904,782	-	38,729,322	-	-	-	56,634,103
Corporate Commercial Paper	22,797,996	-	2,456,968	-	9,941,830	-	35,196,794
	<b>\$96,488,954</b>	<b>\$43,226,546</b>	<b>\$80,523,438</b>	<b>\$-</b>	<b>\$33,480,596</b>	<b>\$3,017,650</b>	<b>\$256,737,183</b>



## MONTHLY EXECUTIVE REPORT

### December 31, 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
5/3 Securities	Purchase	Federal Home Loans Bank	4,040,700.04
5/3 Securities	Purchase	Federal Home Loans Bank	3,038,502.57
5/3 Securities	Purchase	Federal Home Loans Bank	3,001,836.08
5/3 Securities	Redemption	Societe Generale Disc Commercial Paper	(10,000,000.00)
2010A Debt Reserve	Redemption	Federal Home Loan Mortgage Corp	(1,201,020.00)

# MONTHLY EXECUTIVE REPORT

## December 31, 2022

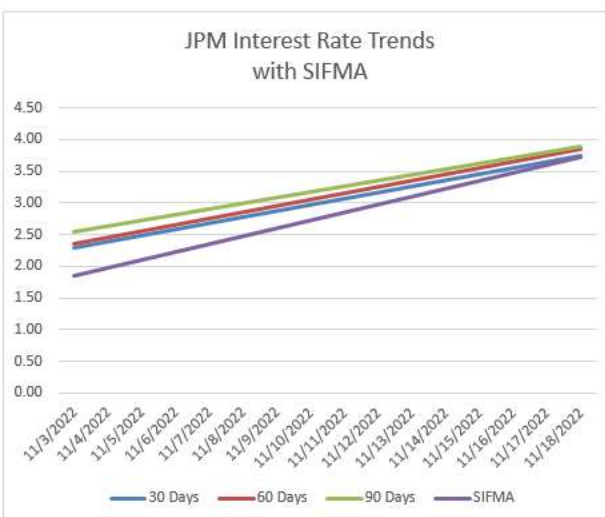
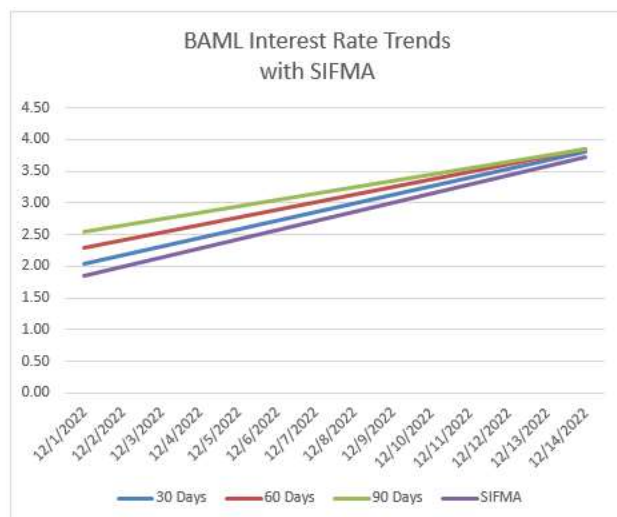
### Commercial Paper Program Summary

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 December, we had three notes mature that were replaced with new notes with an average rate of 2.88% and average terms of 81 days. In December, we issued one new \$10M note with a rate of 2.72% and a term of 98 days. In January, we have three notes maturing totaling \$40M.

The CP Construction Fund balance as of December 31<sup>st</sup> was \$6,603.56. Outstanding CP notes are currently split 50% with JP Morgan and 50% 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
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%
12/2/2022	54658QDK7	10,000,000	2.50%	91	3/3/2023	JPM	62,328.77	Roll	1.85%	0.65%
12/5/2022	54658QDL5	10,000,000	2.50%	93	3/8/2023	JPM	63,698.63	Roll	1.85%	0.65%
12/7/2022	54658QDM3	10,000,000	2.72%	98	3/15/2023	JPM	73,030.14	New	1.85%	0.87%
12/15/2022	54658NDM0	10,000,000	3.65%	60	2/13/2023	BAML	60,000.00	Roll	3.73%	-0.08%
Currently Outstanding: \$ 100,000,000							\$ 693,373			

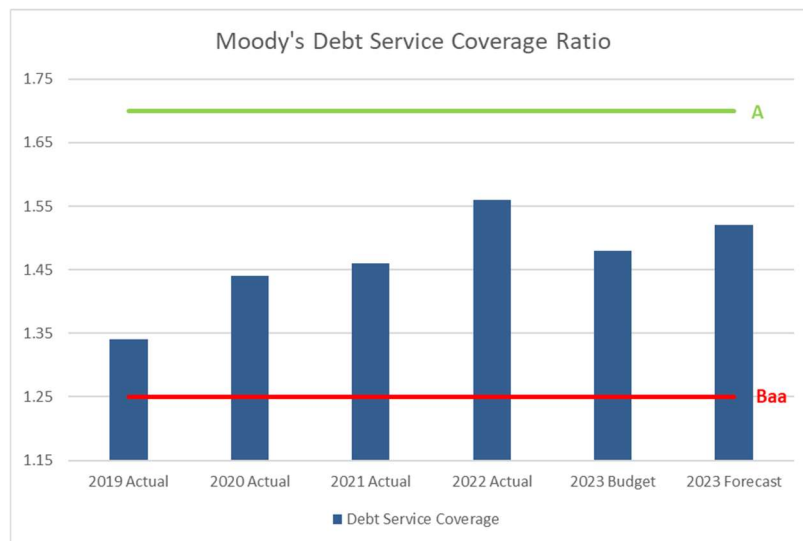
The Securities Industry and Financial Markets Association (SIFMA) publishes a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations (VRDOs) with certain characteristics. The Index is calculated and published by Bloomberg and is overseen by SIFMA's Municipal Swap Index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



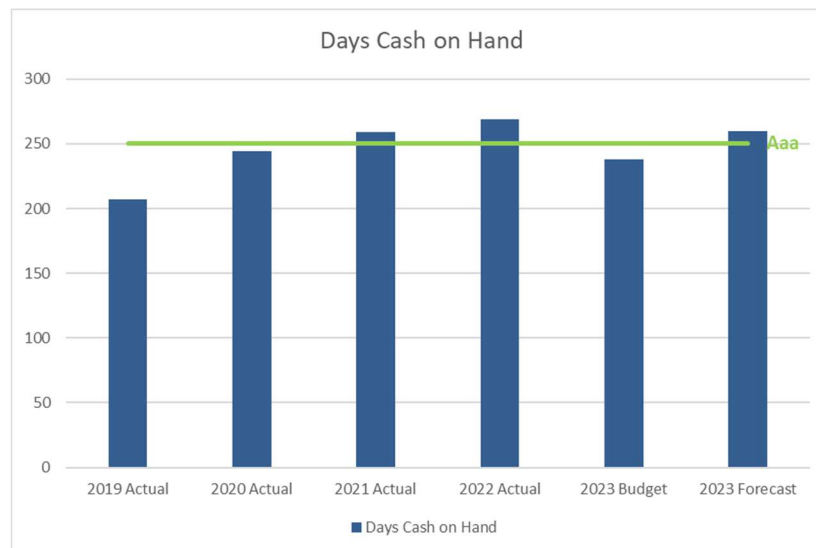
## QUARTERLY FINANCIAL REPORTING

### 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 the Aaa Moody's rating range for this KPI.

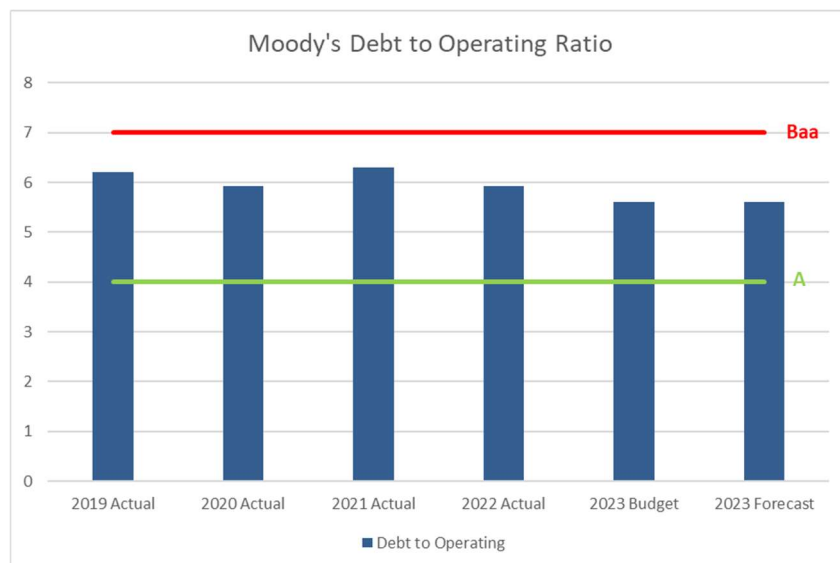


## MONTHLY EXECUTIVE REPORT

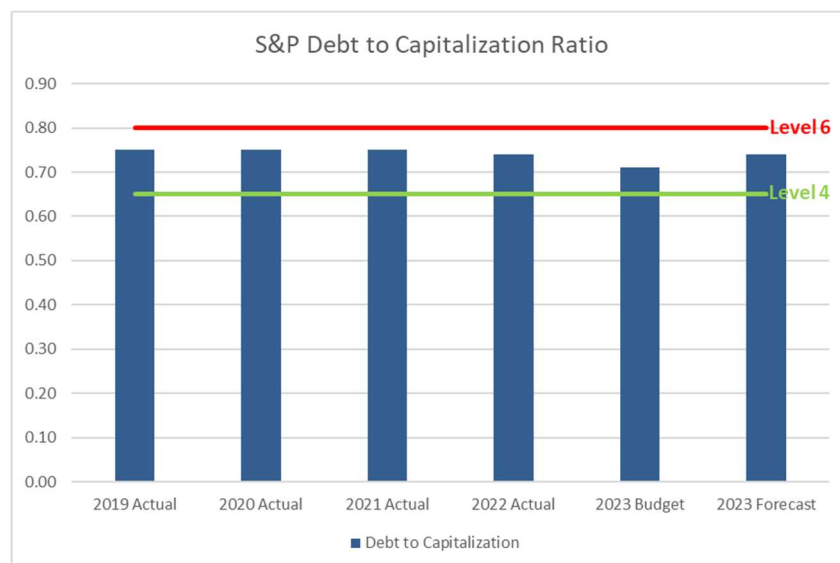
### December 31, 2022

#### 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.

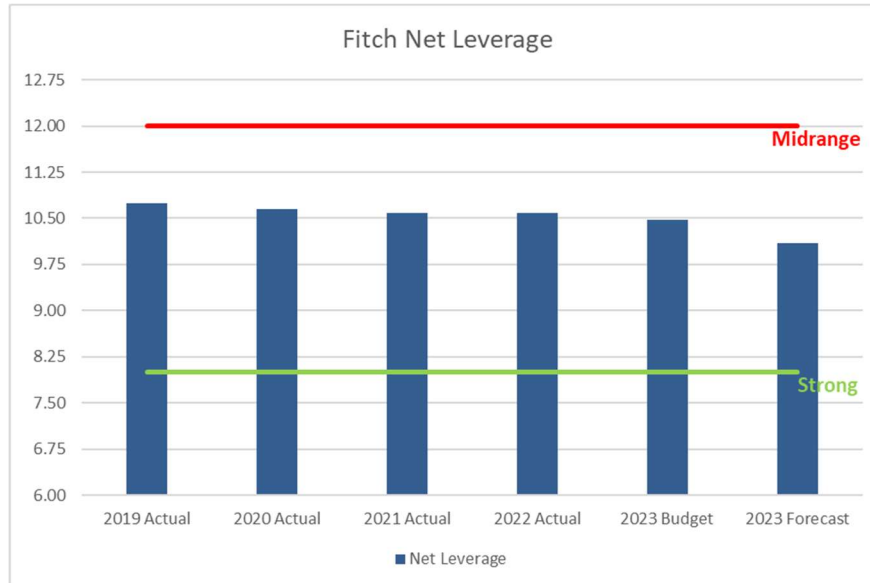


## MONTHLY EXECUTIVE REPORT

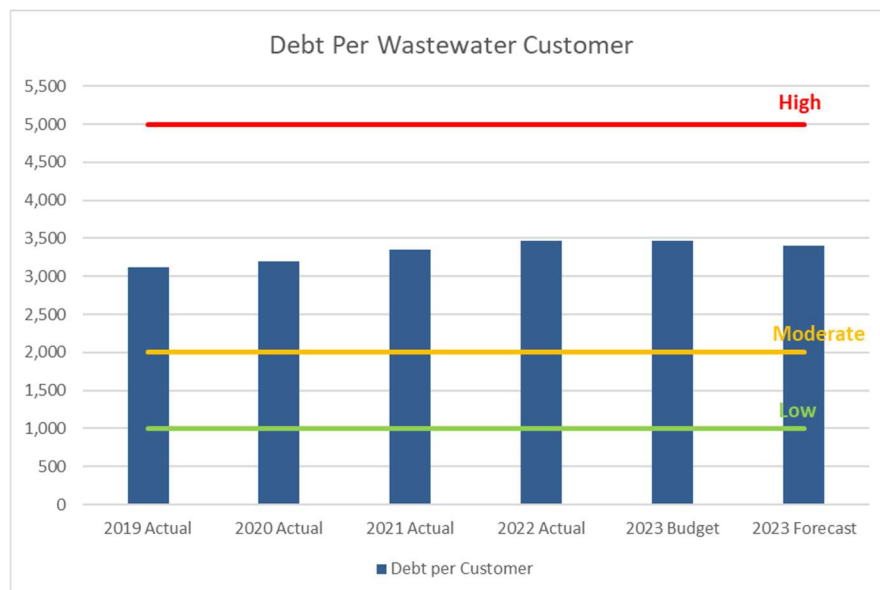
### December 31, 2022

#### 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.

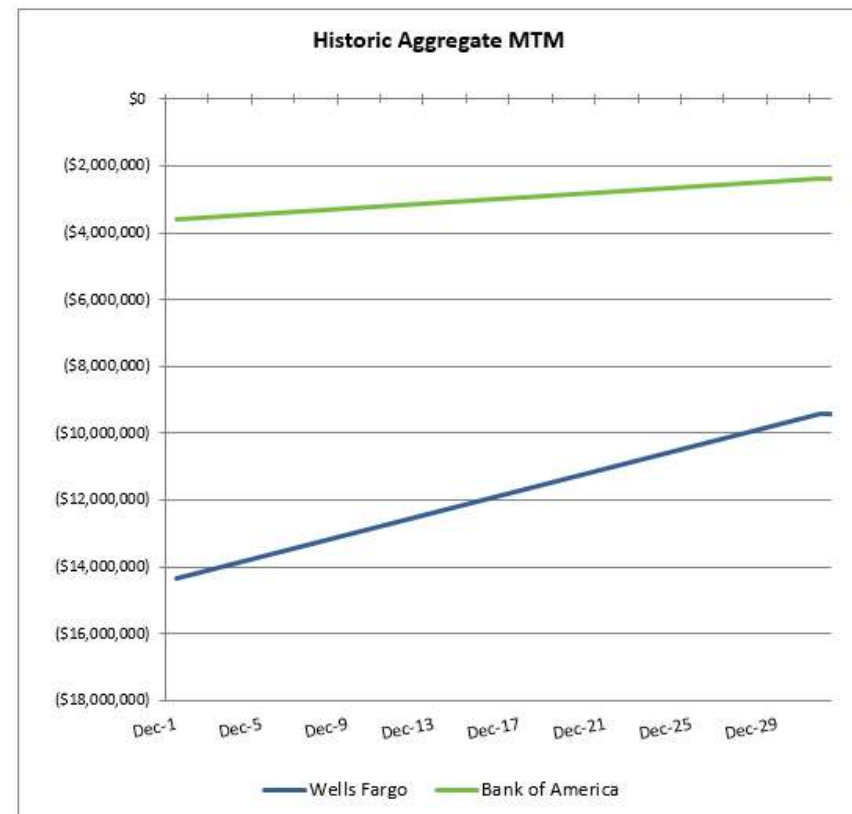
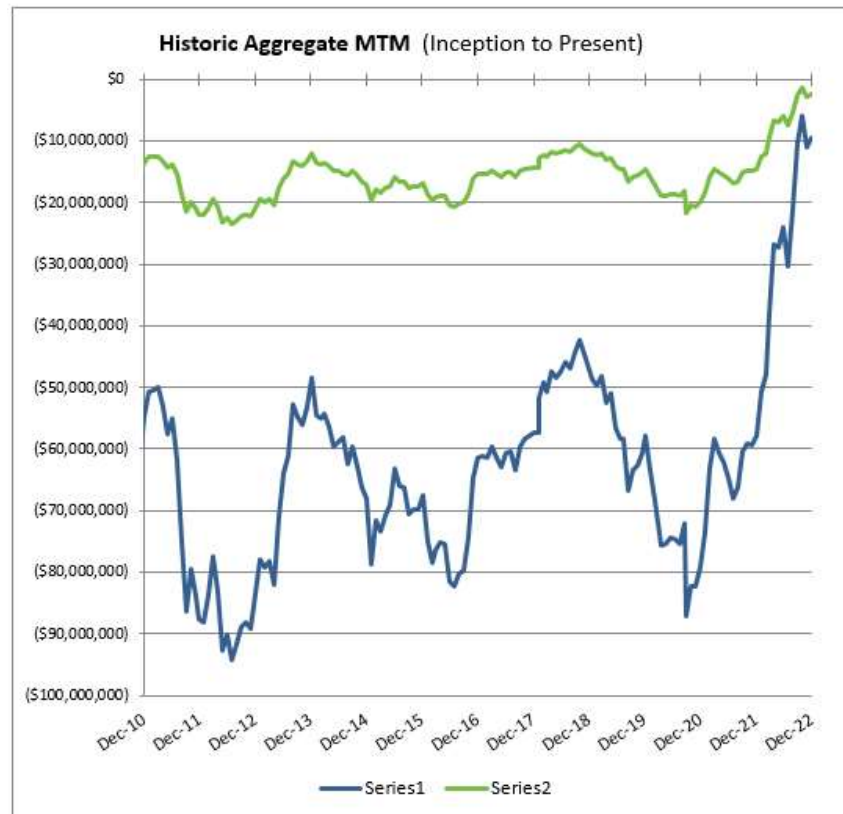


## MONTHLY EXECUTIVE REPORT

### December 31, 2022

#### Market to Market on Swaps

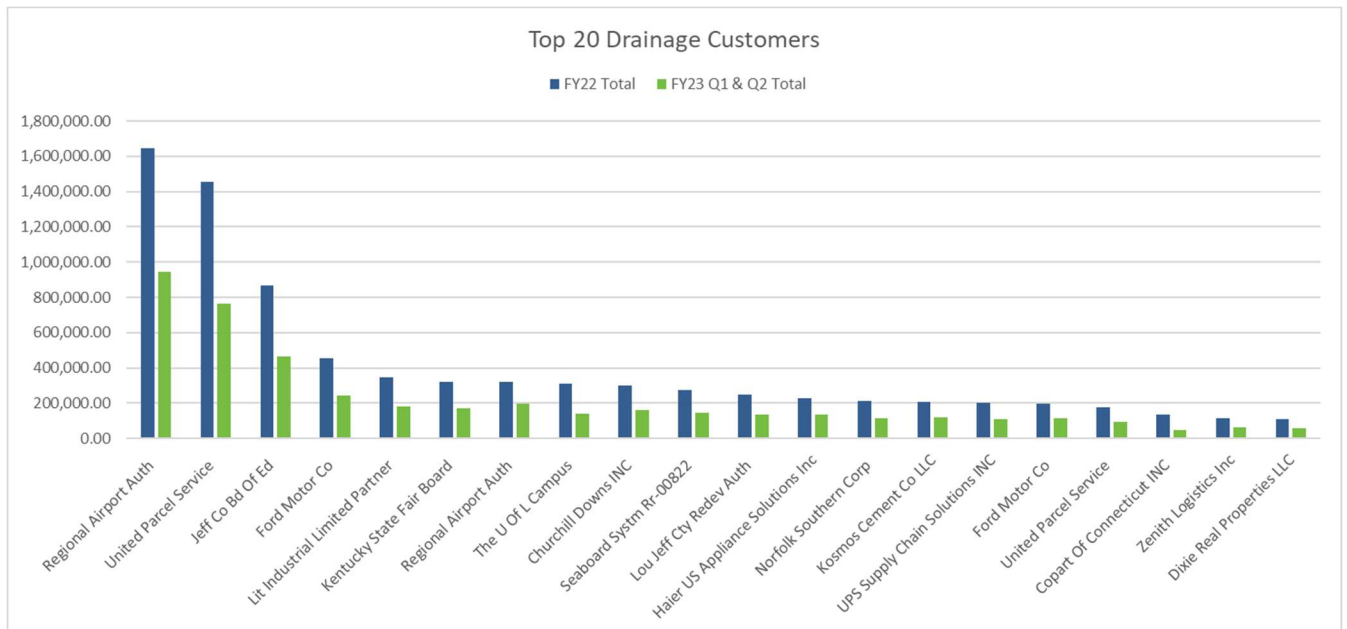
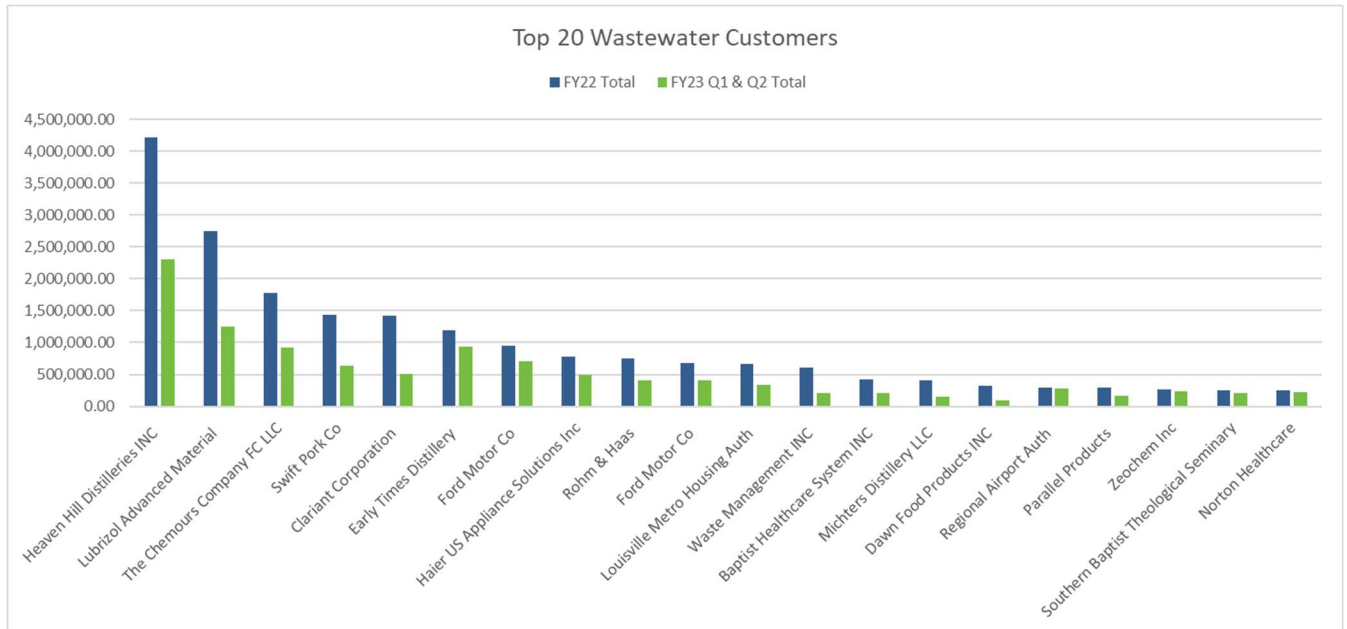
Credit Support Provider	Description	Maturity Date	Notional Amount	Outstanding Notional Amount	Clean Market Value	Accrued Interest	Market-to-Market Value
Wells Fargo NA	1999 - 1 - \$225.732M 67% LIBOR Fixed Payer	5/15/2033	180,716,000.00	180,716,000.00	(9,438,374.47)	5,612.98	(9,432,761.49)
Bank of America NA	1999 - 2 - \$56.433 67% LIBOR Fixed Payer	5/15/2033	56,433,000.00	45,179,000.00	(2,358,930.07)	1,037.18	(2,357,892.89)
			<b>\$ 237,149,000</b>	<b>\$ 226,000,000</b>	<b>\$ (11,797,305)</b>	<b>\$ 6,650</b>	<b>\$ (11,790,654)</b>



# MONTHLY EXECUTIVE REPORT

## December 31, 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, Bullitt and Oldham County projects was approved by the Board in May 2022. The approved budget was based upon \$190.4M in total expenditures forecasted at that time for the projects anticipated to be active during the Fiscal Year July 1, 2022 through June 30, 2023. In addition, \$5M was set aside in Management Reserve to fund emergencies and other unanticipated priorities for a total approved budget ceiling of \$195.4M.

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

### *CIP Priorities for Operations*

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

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

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



## MONTHLY EXECUTIVE REPORT

### December 31, 2022

Sewer is in construction. Additional sewers are in this program that is included in the amended Consent Decree.

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

### FY23 CIP OVERALL PERFORMANCE

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

- **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 December 31, 2022, the Performance Budget Target is \$191.8M.

FY23 capital expenditures for the Wastewater, Stormwater, and Support Services Programs totaled \$59.4M through December 2022. This spend represents approximately 30.4% of the \$195.4M FY23 capital budget and 30.9% of the budget performance target.

The forecasted spend for FY23 has been lowered to \$185M due primarily to easement issues impacting design progression and construction starts, as well as equipment delivery constraining construction activities.

#### Capital Budget Performance Summary

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

Financial Category	Value	Comments
FY 2023 Budget Ceiling	\$195.4M	Approved by MSD Board
<b>FY 2023 Performance Budget Target</b>	<b>\$191.8M</b>	<b>Budget Ceiling minus Mgmt. Reserve</b>
<b>FY 2023 Spending Projection</b>	<b>\$185.0M</b>	<b>Forecasted Spend</b>
FY 2023 Actuals	\$59.49M	30.4% 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.

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

*FY23 Evolving Spend Forecast and Actuals*

FY23	Monthly Baseline Performance Target	Monthly Actuals
July 2022	---	\$ 1.4M
August 2022	\$12.1M	\$ 6.9M
September 2022	\$12.6M	\$ 6.7M
October 2022	\$13.4M	\$14.8M
November 2022	\$15.2M	\$12.1M
December 2022	\$16.4M	\$17.5M
January 2023	\$16.7M	
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>\$ 59.4M</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 schedules and budgets have been impacted by the following:

#### Construction bids

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

#### Supply-Chain Project Impacts

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

### December 31, 2022

### 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	25	\$0	\$6,829,565	\$0
Design	60	\$31,284,485	\$53,821,070	\$9,895,535
Construction	50	\$127,460,619	\$79,141,047	\$25,624,790
Studies	13	\$2,658,153	\$3,051,767	\$677,782
<b>TOTAL</b>	<b>148</b>	<b>\$161,403,259</b>	<b>\$142,843,449</b>	<b>\$36,198,108</b>

*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.

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

#### Year-to-Date Active Emergency Contract Work

Emergency	Funding Source	Date Began	Emergency Certificate Amount (\$)	Contractor
MFWQTC LG Dryer Replacements	D20285	1/1/2020	\$69,668,264	TBD
SGC Gates Replacement - Design	H22022	7/1/2021	\$2,000,000	AECOM
CMF Remediation	G22001	11/11/2021	\$150,000	Brownfields Environmental Consulting
Bar Screen Repair at the SWPS	G22001	1/28/2022	\$75,000	EZ Construction Company
15th Street Sewer Repair	A22183	3/7/2022	\$500,000	Temple and Temple
SGC Gates Replacement - Construction	H22022	4/1/2022	\$2,000,000	Pace Contracting, LLC
2218 Dorothy Ave	G23001	8/23/2022	\$50,000	TRC, LLC (WBE)
2400 Northwestern Pkwy	G23001	9/26/2022	\$75,000	TBD
ProLogis Treatment Plant	Y23098	10/10/2022	\$75,000	MAC Construction
Wenzel and Liberty Sewer Repair	G23001	11/25/2022	\$250,000	Basham Construction and Rental
Mellwood Closure	F21096	1/3/2023	\$65,000	Pace Contracting, LLC
Blue Lick Road Bus Compound	G23001	Dec Start*	\$75,000	TBD
5th St FPS MCC's	F15012	Dec Start*	\$335,000	TBD
MFWQTC MEB East & West Freight Elevators	G23001	Dec Start*	\$500,000	TBD

\*Exact start date unknown at the time of this report

#### Projects Removed from Cashflow

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

#### Projects Removed from Cashflow Forecast

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

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

Budget ID and Project Name	FY23 Budget	Lifetime Actuals	Reason
H23017 CCWQTC Preliminary Treatment Improvements	\$558,623	---	Project postponed due to new headworks decision

#### Major Project Highlights

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

#### Major Design/Build Projects

Budget ID & Project Name	Design Finish	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
D22100 Morris Forman Water Quality Treatment Plant Biosolids Facility	9/19/2023	\$340.5M	\$8.5M	\$8.8M	\$8.5M	60% Design has been completed.
F18515 Paddy's Run FPS Capacity Upgrade	9/21/2023	\$250.1M	\$7.7M	\$4.1M	\$7.4M	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	\$11.4M	\$9.7M	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	\$8.9M	\$5.9M	Construction is on going.

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

Budget ID & Project Name	Anticipated Substantial Completion	Current Project Estimate at Completion	FY23 Budget	Lifetime Actuals	FY23 Spending Projection	Project Outlook
D20285 MFWQTC LG Dryer Replacements	1/29/2023	\$74.9M	\$7.0M	\$70.9M	\$10.0M	Awaiting arrival of flare equipment.
H22022 SGC Gate Replacements	9/15/2023	\$8.9M	\$5.9M	\$1.9M	\$2.5M	Construction is on going.
G21225 MFWQTC & CMF Entrance Enhancements	10/31/2023	\$5.7 M	\$5.1M	\$0.5M	\$4.5M	Achieved substantial completion 11/5/2023

### CIP MANAGEMENT TEAM MEETING HIGHLIGHTS

A regular CIP Management Team meeting was not held in December. The meeting time was utilized for high level budget strategy discussions.

### 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. [\[Link\]](#)

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.

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

*Notice of Advisement Log for Reporting Month*

ID	Project Name	Advisement Category	Impact on FY Budget	Status
501	UofL MOA for Mill Creek Watershed Plan 319 Grant	New Project - GRANT	---	Approved
502	Shepherds Crossing DIP Phase 2	New Project	\$70,000	Approved
503	CMF Garage Fluid Delivery System	EAC, Budget, Schedule	\$75,000	Approved
504	BC Office Facility Study and Improvements	New Project	\$50,000	Approved
505	Lynnview Catch Basin Replacement	New Project	\$260,000	Approved
506	CCWQTC Re-Rating to 9 MGD	Construction Advancement, Budget, Schedule	\$236,881	Approved
507	10701 West Manslick Road DIP	New Project	\$120,000	Approved
508	Stormwater Regional Facilities Fee Basin	New Project	\$48,862	Approved
509	CCWQTC Solids Handling Centrifuge Relocation	EAC, Budget, Project Name Change, Schedule	\$300,000	Approved
510	CMF Materials Sorting Facility Stormwater Imp	New Project	\$255,000	Approved
511	Supplemental Engineering Staff Support	New Project	\$350,000	Approved
512	KY 393 Reconstruction SSR	New Project	\$40,000	Approved
513	Customer Relations Phone Migration	Schedule Impact	---	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/Bid Opening*
H09196	Leven Pump Station Elimination	Corcoran Quinn	1/1/2023
C23121	Shepards Crossing DIP Phase 2	Exeley Joe	1/10/2023*
H22032	DRGWQTC Sodium Bisulfite Bldg Improvements	Potempa Julie	1/12/2023
D22098	Cedar Creek WQTC Re-Rating	Leong Steven	1/24/2023*
H23013	Beargrass Interceptor Relief Rehab	Gregory Chris	1/30/2023

## MONTHLY EXECUTIVE REPORT

### December 31, 2022

Budget ID	Project Name	MSD Project Manager	Projected Advertising Start/Bid Opening*
D22186	MFWQTC Computer Room Upgrades – Rebid	Potempa Julie	1/26/2023*
W21126	Ohio River Service Area Lift Station Rehabilitation	Gregory Chris	1/30/2023
C23137	City of Lynnview Catch Basin Replacement Project	Exley Joe	2/2/2023*
G22078	CMF Automated Vehicle Wash Facility	Flaherty Brandon	2/9/2023
H23018	Cedar Creek Main Interceptor	Gregory Chris	2/26/2023
E15035	Lake Forest Pump Station Eliminations	Gregory Chris	3/13/2023

#### **Bid Openings**

Bids opened during the reporting month are shown below.

Budget ID	Project Name	Bid Opening	Engineer's Estimate	Awarded Bid
E21062	Modesto Pump Station Elimination	12/22/2022	\$ 251,000	\$ 347,640

#### **Construction - Notice to Proceeds (NTP) Issued**

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

Budget ID	Project Name	NTP Date
D22209	DRG Centrifuge Maintenance Platforms	12/5/2022
G18147	Admiral Rd Pump Station Improvements	12/20/2022

**END OF REPORT**