



# MSD Series 2025 Revenue Bonds

Metro Council Budget Committee  
May 8, 2025



# MSD Protects Public Health and Safety through 3 Core Services

## Wastewater Collection and Treatment



**3,200 miles** of sewer lines collect **153 million gallons** of wastewater each day for treatment at five regional water quality treatment centers (Morris Forman, Derek R. Guthrie, Cedar Creek, Floyds Fork, and Hite Creek) in Jefferson County.

Regional expansion is allowing water quality improvements in Oldham and Bullitt Counties.

## Reliable Flood Protection



The Ohio River Flood Protection System includes **26.1 miles of floodwall** and earthen levee, **16 flood pump stations**, 150 floodgates, and 80 floodwall closures

This system **protects more than 216,000 people, 87,000 homes, and \$34 billion in property** in Jefferson and Bullitt Counties.

## Stormwater Drainage Management



MSD manages inland drainage systems and improvements

The municipal separate storm sewer system (MS4) program protects **11 watersheds** and **760 miles of streams** in Jefferson County.

## Governance and Oversight: MSD Board

- By statute, the MSD Board is appointed by the Metro Mayor, reviewed by the Governance and Accountability Committee, and approved by Metro Council.
- There are 8 Board seats distributed to different State Senate Districts. There can be two from the same district. Senate District 6 currently has 2.
- 4 of 8 MSD Board members appointed within the last 2 years.
- Current board makeup: (3) Republicans, (3) Democrats, (2) Independents
- MSD is **NOT** part of the process for selecting Board members.
- MSD's Board governs our annual budget, rates, policies, and initiatives which are reviewed in committees prior to being approved by the full Board.

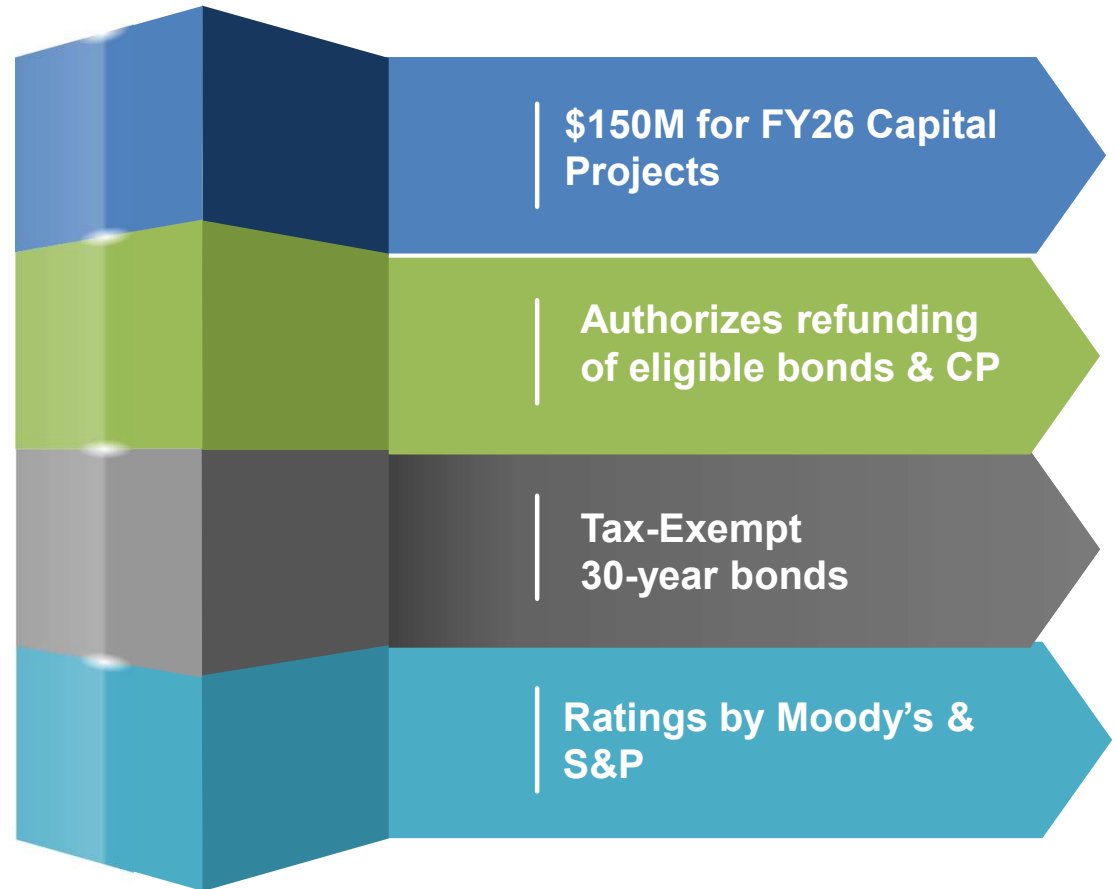
# Proposed Series 2025 Revenue Bonds



*Morris Forman Water Quality Treatment Center*

## Purpose of Series 2025 Bonds:

- Funding for FY26 Capital Projects
- Refinance Bonds for Interest Savings
- Refund Outstanding Commercial Paper



## KRS 76.150: District Revenue Bonds

(2)...the bonds shall be authorized by resolution of the board...

*...the issuance of bonds shall first be authorized by ordinance passed by the legislative body of the city and approved by the mayor of the city.*

...the bonds shall be sold at public sale...

(4) The bonds or other obligations of the district shall not constitute an obligation or indebtedness of the city or of the county...

## Preliminary Schedule: Series 2025 Revenue Bonds

MAY	Metro Council Ordinance
JUNE	Rating Agency Meetings
AUGUST	Competitive Bond Sale & Closing

## Bond Approval Rationale

- Approximately **90%** of our capital budget is **regulatory and mandatory**. Failure to complete these projects will result in fines – civil and criminal penalties.
- Rate adjustments are dictated based on work required by EPA, the state of Kentucky, Air Pollution Control District, and other regulatory bodies.
- Failure to approve bond issuances, adjust rates to meet those obligations, and thus increase revenues, could result in a rating downgrade which would have catastrophic effects on MSD's financial position and the cost to borrow money.
- **The bond approval action does NOT dictate a rate increase percentage.**
- MSD Board will take up FY26 budget and preliminary rate adjustment May 27.

## Cash Financing versus Debt Financing

- MSD Board has adopted Debt Issuance Policy and Procedures.
- Debt Issuance Policy ensures each bond issue meets legal requirements and ensures the financial strength of MSD.
- A mix of debt and cash financing spreads costs over time and ensures residents who benefit from improvements share in the cost rather than placing full cost on current ratepayers.
- Debt financing allows improvements to move forward with lower rates now than would be required if projects were entirely cash financed.
- Eliminating debt financing means rates must be higher now or improvements will be delayed which would have regulatory and community implications.

## How Does MSD Spend User Rates?

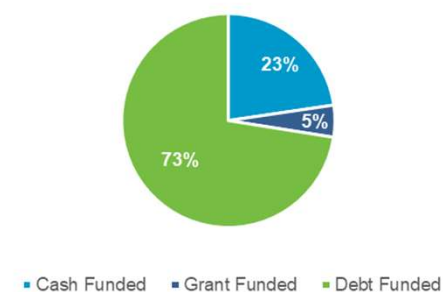


Based on Fiscal Year 2025 Budget

# Capital Plan Financing

Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>Total CIP (in millions)</b>	<b>\$198.30</b>	<b>\$179.24</b>	<b>\$147.60</b>	<b>\$177.41</b>	<b>\$255.09</b>	<b>\$298.80</b>	<b>\$310.20</b>	<b>\$226.31</b>	<b>\$209.27</b>	<b>\$209.70</b>
<b>CIP Funding Source</b>										
Cash Funded	61.82	21.34	14.60	32.11	95.49	67.80	54.30	57.40	83.10	95.40
Grant Funded	2.10	2.60	2.30	1.30	3.60	14.40	11.40	0.00	0.00	0.00
Debt Funded	134.38	155.30	130.70	144.00	156.00	216.70	244.50	168.90	126.20	114.30
<b>Cash &amp; Grant Funding (in millions)</b>	<b>\$ 63.92</b>	<b>\$ 23.94</b>	<b>\$ 16.90</b>	<b>\$ 33.41</b>	<b>\$ 99.09</b>	<b>\$ 82.20</b>	<b>\$ 65.70</b>	<b>\$ 57.40</b>	<b>\$ 83.10</b>	<b>\$ 95.40</b>
<b>Debt Funding (in millions)</b>	<b>\$134.38</b>	<b>\$155.30</b>	<b>\$130.70</b>	<b>\$144.00</b>	<b>\$156.00</b>	<b>\$216.70</b>	<b>\$244.50</b>	<b>\$168.90</b>	<b>\$126.20</b>	<b>\$114.30</b>
<b>Debt Funding Percentage</b>	<b>68%</b>	<b>87%</b>	<b>89%</b>	<b>81%</b>	<b>61%</b>	<b>73%</b>	<b>79%</b>	<b>75%</b>	<b>60%</b>	<b>55%</b>

2025 Planned CIP Financing



## Regulatory Compliance Remains Primary Driver

Overall CIP by Regulatory Program	FY25	FY26	FY27	FY28	FY29	5-year Total
Consent Decree	\$153,392,000	\$160,601,000	\$98,875,000	\$116,977,000	\$79,908,000	\$609,753,000
Agreed Order	\$11,365,000	\$14,609,000	\$19,213,000	\$1,258,000	\$1,640,000	\$48,085,000
CMOM	\$69,418,000	\$64,849,000	\$45,969,000	\$46,280,000	\$73,417,800	\$299,933,800
NMC	\$26,844,000	\$35,431,000	\$32,923,000	\$14,280,000	\$3,002,000	\$112,480,000
Stormwater Quality (MS4)	\$3,080,000	\$2,541,000	\$2,659,000	\$2,432,000	\$2,339,000	\$13,051,000
<b>Grand Total</b>	<b>\$264,099,000</b>	<b>\$278,031,000</b>	<b>\$199,639,000</b>	<b>\$181,227,000</b>	<b>\$160,306,800</b>	<b>\$1,083,302,800</b>
Percent of Overall CIP	88%	90%	88%	87%	76%	86%

- This includes \$49.3M in Odor Control Improvement projects over the 5-year CIP that are mandated under an Agreed Order with Air Pollution Control District.

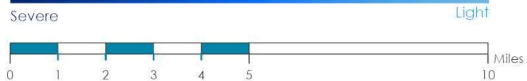
# The Louisville Metro Flood Protection System, authorized in 1938...

...Safeguards economic vitality for Kentucky and the Region

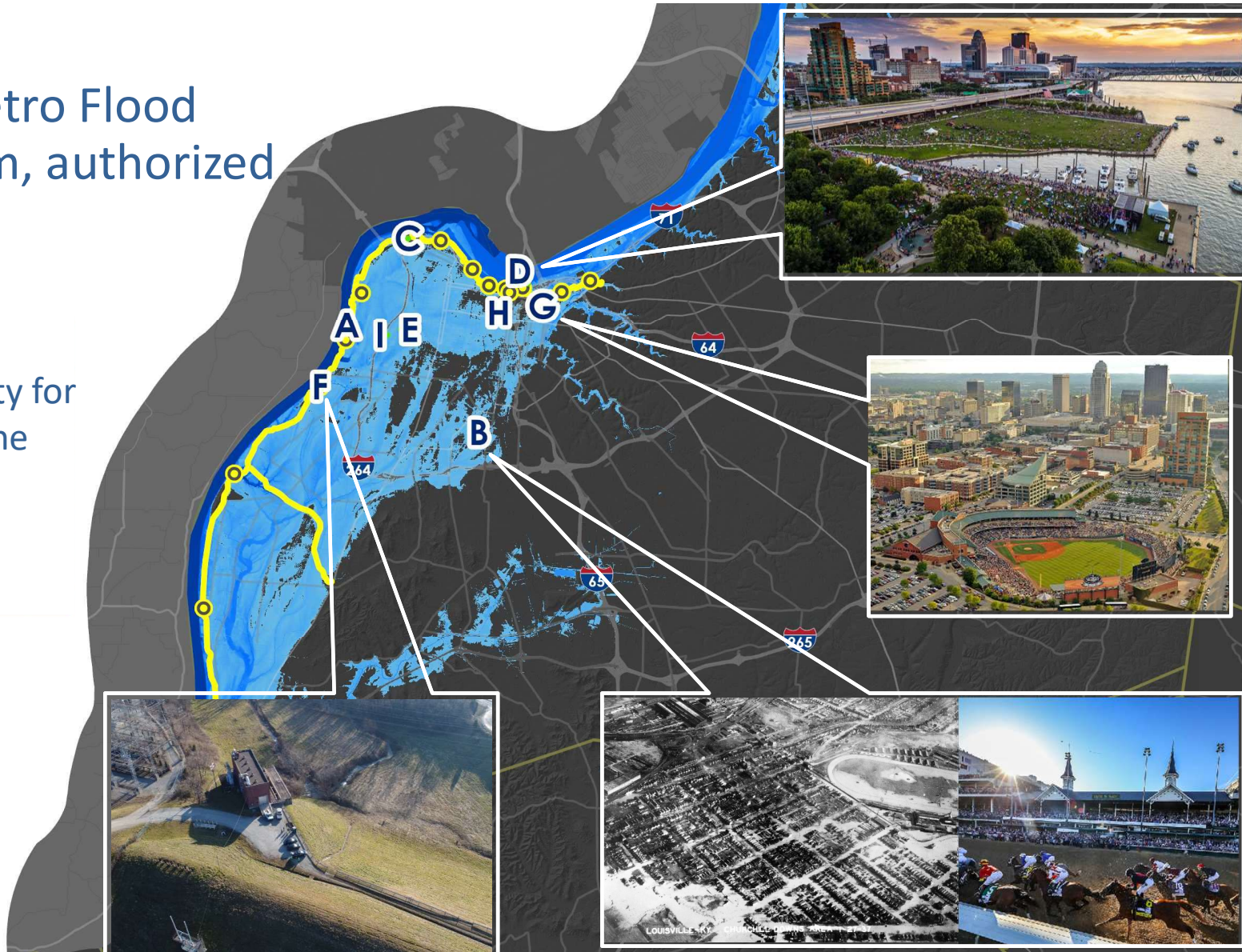


- Flood Pump Station
- Flood Wall
- County Boundaries

Flooding in the Event of Flood Protection System Failure

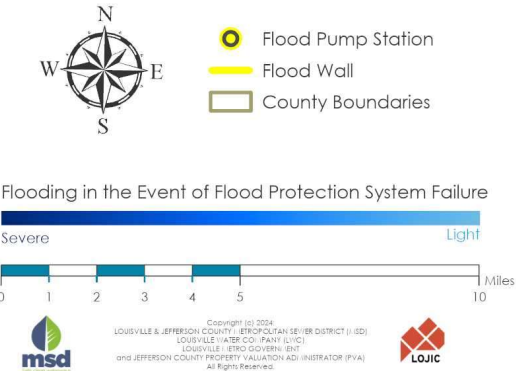


Copyright (c) 2024  
LOUISVILLE & JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT (MSD)  
LOUISVILLE WATER CO. (LWC)  
LOUISVILLE METRO GOVERNMENT (LMG)  
and JEFFERSON COUNTY PROPERTY VALUATION ADMINISTRATOR (PVA)  
All Rights Reserved.



# The Louisville Metro Flood Protection System, authorized in 1938...

1937 Flood Depth Mapping		
Label	Location	Flooding Depth, ft
A	Chickasaw Park	3.4
B	Churchill Downs	3.7
C	Good Shephard Catholic Church	15.9
D	Great Lawn	26.3
E	Muhammad Ali's Boyhood Home	6.9
F	Paddy's Run FPS	8.9
G	Slugger Field, Home Plate	14.1
H	USACE Louisville District	2.1
I	West End School	1.3



## Louisville experienced two major flood events in a span of six weeks.

	February 2025 Event	April 2025 Event
Gallons pumped	3.7 billion	12.1 billion
Active flood pump stations	9	15
Floodgates in service	39	65
Floodwall Closures	2	7
Supplemental MSD staff	155	Over 170









# Paddy's Run Flood Pump Capacity Upgrade



**Paddy's Run Flood Pump Station Construction Site**  
(originally built 1953)

## Background:

- The Paddy's Run FPS is part of a system that protects approximately 216,000 people, 87,000 structures, and \$34B in property and is located in Southwest Jefferson County.
- Project will more than double flood pumping capacity

## Schedule:

- Substantial Completion in Spring 2027
- Consent Decree Deadline December 2027

## Cost Estimate ~\$230 million supplemented by:

- \$74M KIA SRF Low Interest Loan
- \$6.2M Emerging Contaminant Forgivable Loan
- \$14M Cleaner Water Grants

# MFWQTC Biosolids Processing Solution



**Morris Forman Water Quality Treatment Center**

## Background:

Project will provide *sustainable biosolids management for the next generation – Class A biosolids*

- Beneficial reuse of digester gas/energy
- Flexibility for future regulatory pressures
- Improved odor control

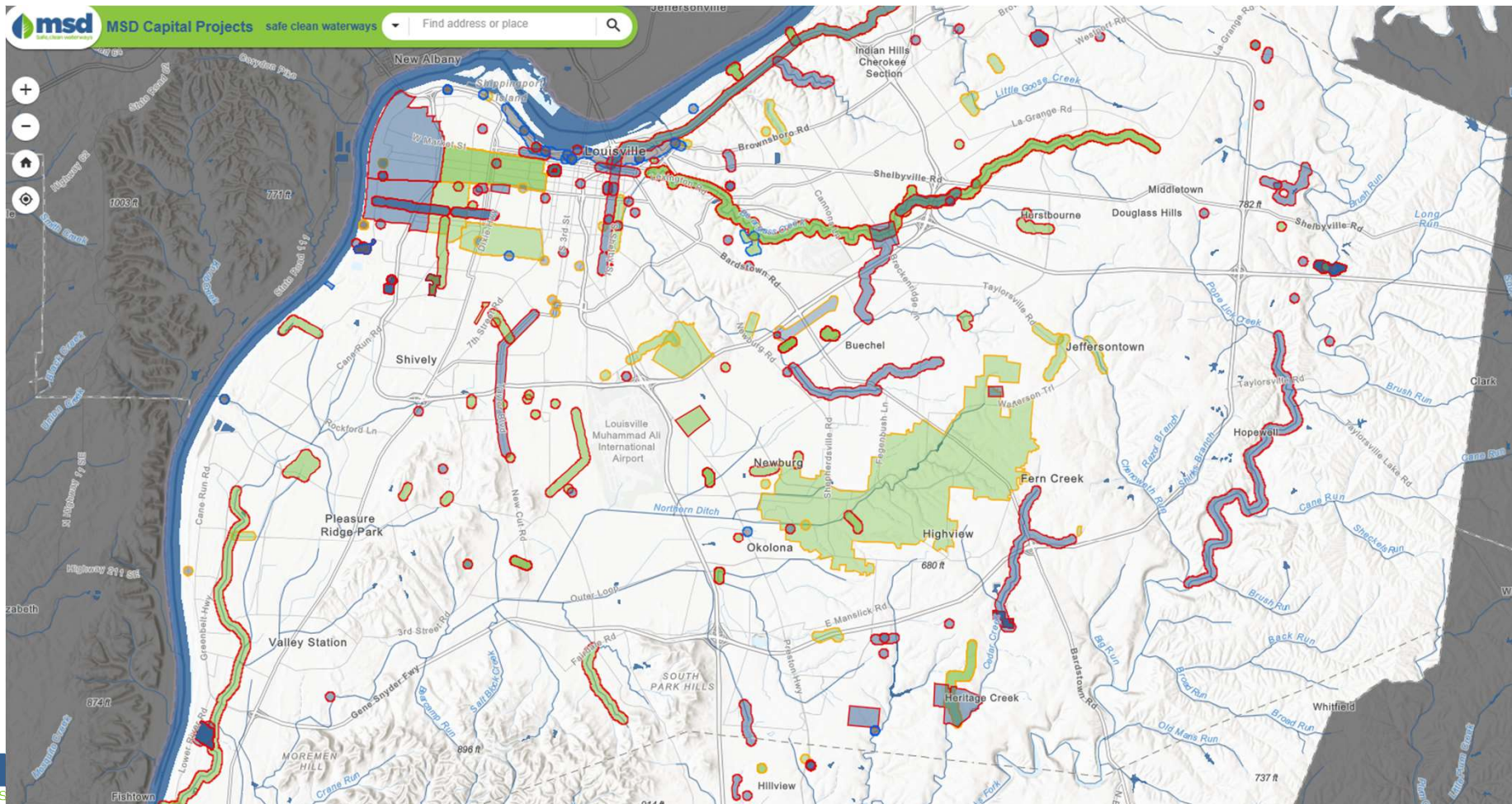
## Schedule:

- Substantial Completion in July 2027
- Consent Decree Deadline March 2028

## Cost Estimate ~\$285 million

- \$97M low interest loan through EPA's WIFIA program

# Project Work Planned and Executed County Wide



## Fiscal Year 2026 Major Projects

Budget ID   Project Name	Status	FY26 Projection
D22100   Morris Forman WQTC New Biosolids Facility	In Progress	\$85,070,000
F18515   Paddy's Run FPS Capacity Upgrade	In Progress	\$70,185,000
D18090   CCWQTC Solids Dewatering Facility	In Progress	\$17,000,000
H25053   Bells Lane Odor Mitigation - EQ and HRT	In Progress	\$10,880,000
D17039   MFWQTC DAFT Rehabilitation	In Progress	\$8,507,000
D24149   MFWQTC Digester Gas Hydrogen Sulfide (H <sub>2</sub> S) Removal	In Progress	\$6,418,000
H09171   Kavanaugh Road PS Elimination	In Progress	\$6,010,000
H09242   Gunpowder PS Elimination	In Progress	\$6,000,000

# Customer Assistance Program



Partnered with Louisville Water, Louisville Water Foundation, and the Metro Office of Resilience and Community Services

- Bill Discounts
- Flexible Payment Options
- Grants

FY25 MSD Budget for Customer Assistance:

- \$500,000 for EWRAP (3,000 households)
- \$1.4M Senior Citizen Discount (7,000+ households)
- \$150,000 for the Louisville Water Foundation

# Significant Deferred Projects

## Economic Development

- Cedar Creek WQTC Expansion to 12.0 MGD \$72M; Design FY29
- Floyds Fork WQTC Expansion to 10.0 MGD \$60M; Design FY30
- Floyds Fork Interceptor \$177M; Construction FY30
- Reality Trail Int & PS Upgrades \$3.2M; Design FY30

## Operational Improvements

- Northern Ditch PS Replacement \$27M; Construction FY29
- MFWQTC MDS Gate 1 Replacement \$10M; Design FY27
- MFWQTC Effluent Diffuser \$10M; Design FY27
- DRGWQTC Effluent Diffuser \$10M; Design FY30
- MFWQTC West Headworks Improvements \$16.5M; Design FY28
- 13 PS Elim or Improvement projects \$13M; varies

## Flood Protection

- Floodgate 33 Replacement \$1M; Construction FY27
- Pond Creek Breaker Replacement \$1M; Construction FY27
- Gate 138 Access Road \$0.2M; Construction FY27
- Sluice Gate Repair/Replacement Program \$10M; Design FY27

## Odor Control Improvement

- Park Hill Neighborhood Catch Basin Replacement \$2M; Construction FY27
- Russell Neighborhood Catch Basin Replacement Phase 1 \$6M; Construction FY27
- Russell Neighborhood Catch Basin Replacement Phase 2 \$9M; Construction FY31

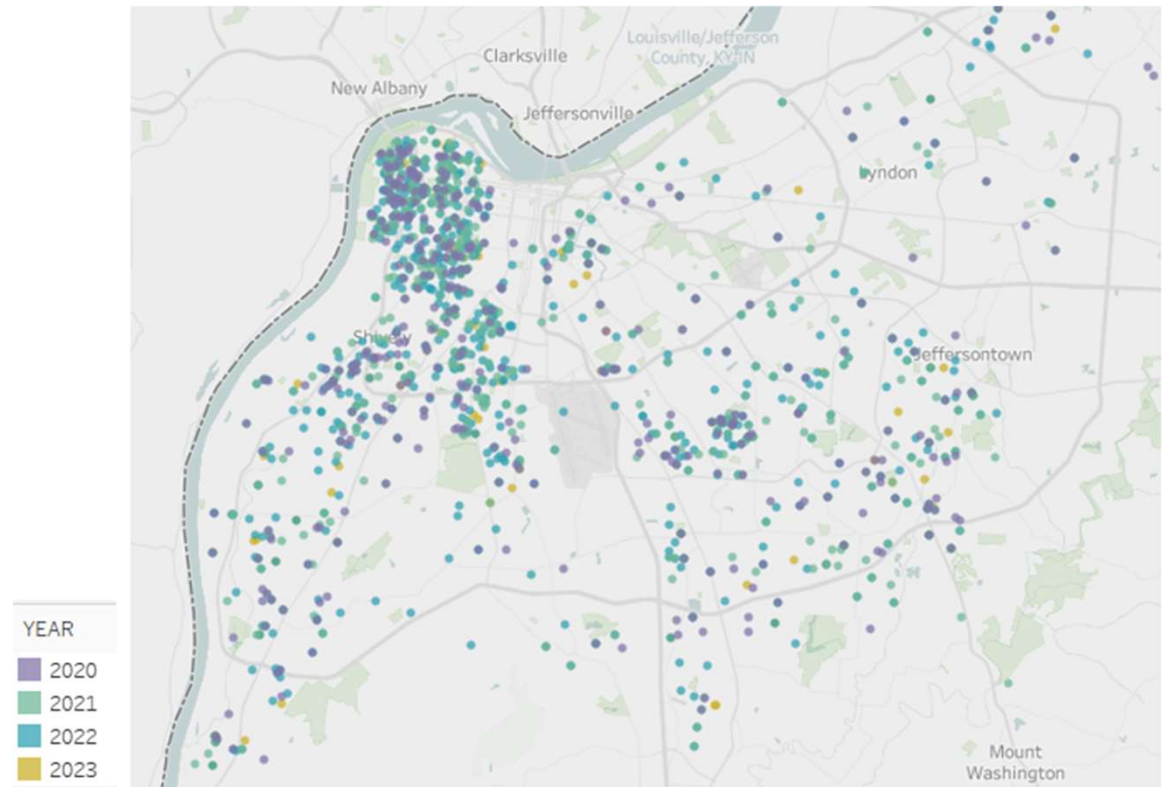


## Largest Projects to Date

Project Name	EAC	ETC	Spending Start	Spending Finish
Waterway Protection Tunnel	\$195.4M	\$0	FY16	FY23
MFWQTC New Biosolids Facility	\$315.2M	\$195.5M	FY22	FY28
Paddy's Run FPS Capacity Upgrade	\$239.2M	\$142.4M	FY21	FY28
Upper Middle Fork PS, FM, Int	\$244.4M	\$243.4M	FY23	FY30
MFWQTC Secondary Treatment Improvements - Phase 2	\$200.0M	\$200.0M	FY29	FY33
<b>\$1,194,200,000</b>				

## Customer Assistance

- Each dot reflects the location of a customer account who has received some form of assistance
  - EWRAP
  - Senior Citizen Discount
  - Community Ministries
  - Payment Extensions & Plans
  - Leak Adjustments



# Questions



# Appendix