

Partnering to Protect Public Health and Safety

**Metro Council Government
Accountability Committee**
June 16, 2020



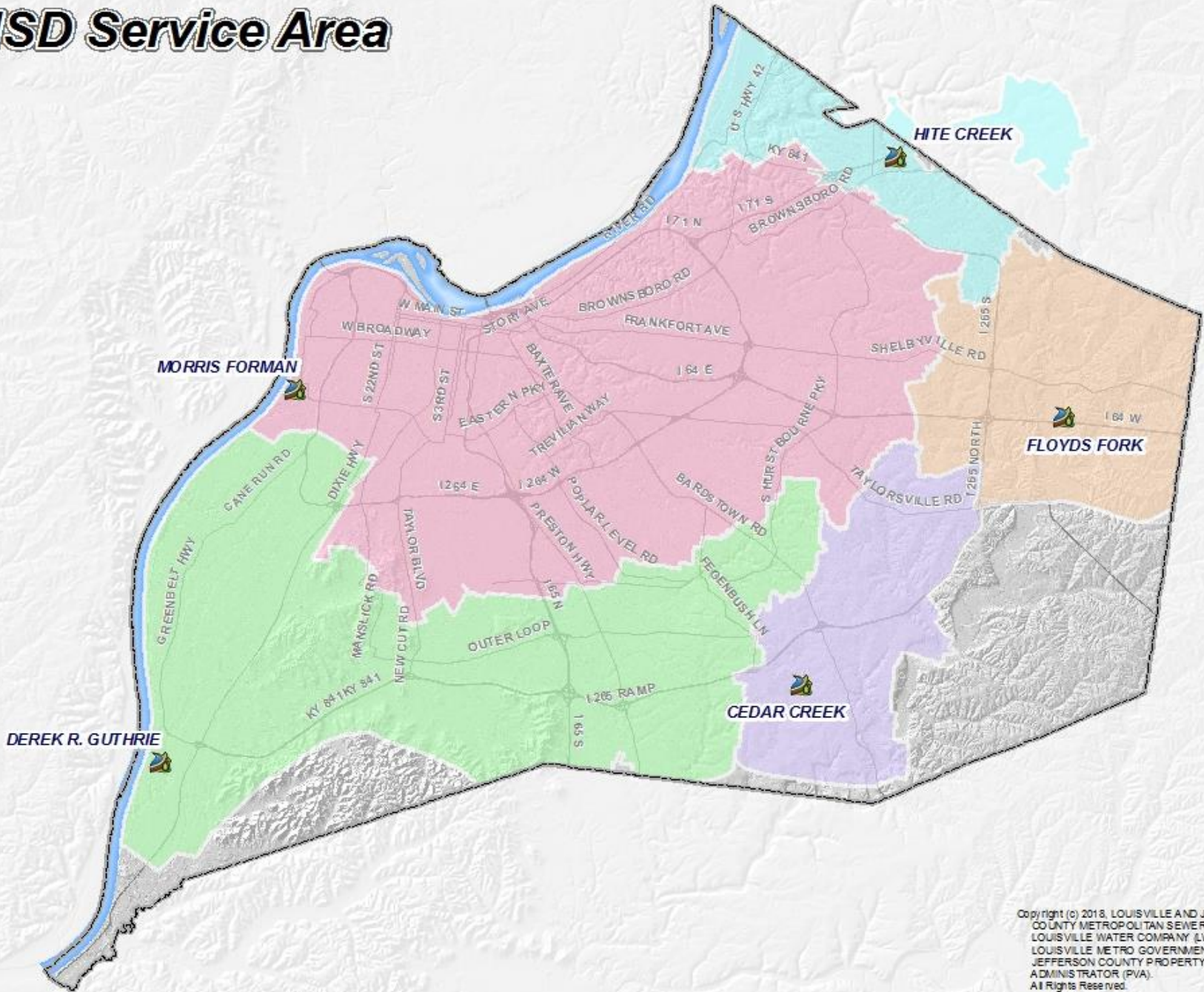
What is MSD?



What is MSD?

- Established under KRS 76 as a “special district” in 1946.
- First wastewater treatment plant in Kentucky built on the site of an old civil war fort in 1958.
- Clean Water Act passed in 1972 with increased regulations on sewer utilities, and established permitting for treatment facilities/collection systems.
- In the 1980s and 1990s much of the MSD resources (and current debt) were directed toward the elimination of over 40,000 septic systems, and nearly 300 small “package” treatment systems.
- There are now 5 Regional Water Quality Treatment Centers.

MSD Service Area



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What is MSD?

- Flood of record – 1937.
- Flood protection system designed and built in response to that event in the 1940s and 1950s (extended through the levee in the SW portion of the county in 1980s).
- In 1987 Louisville MSD was given responsibility for drainage and maintenance of the flood protection system.
- Major Storm Events/Flood Events in 1997, 2009, 2015, 2018.





What is MSD?

- The Consent Decree was negotiated in early 2000s to reduce Combined Sewer Overflows (CSOs) by 2020, and eliminate Sanitary Sewer Overflows (SSOs) by 2024.
- Efforts to improve water quality through adherence to the Consent Decree are on schedule and on budget – and will reduce overflows by over 95%!!
- Projects like the Waterway Protection Tunnel are being built to capture and store overflows, and then pump back to the treatment plant.
- The Consent Decree Plan does NOT address Critical Repair Plan needs.



FY21 Operating Budget

FY21 Budget Considerations

Fixed Costs

- Chemicals
- Contract renewals (CPI-U)
- Health insurance
- CERS expense

Cost Controls

- 66 vacant positions not funded
- Division budgets are lower than FY20
- Created \$6.1M Emergency reserve
- Reserve requires ED & CFO approval

Insurance

- Liability insurance increase of \$200k
- Property insurance increase of \$600k

Bad Debt

- COVID-19 impact

Revenue Uncertainty

- COVID-19 impact



Operating Expense Comparison

MSD FY21 Comparative Operating Budget Dollars in 000's

Operating Expenses	FY20 Budget	FY21 Budget	FY21 Budget / FY20 Budget
Salaries & Wages	\$ 52,278	\$ 52,176	-0.2%
Labor Related Overhead	24,733	23,705	-4.2%
Total Salary & LRO	77,011	75,881	-1.5%
Utilities	17,598	17,113	-2.8%
Contractual Services & Supplies	37,124	41,854	12.7%
Chemicals	4,621	4,958	7.3%
Fuel	1,417	1,251	-11.7%
Insurance Premiums & Claims	2,111	2,812	33.2%
Bad Debt	3,000	3,500	16.7%
Other Operating Expense	2,013	2,023	0.5%
	13,162	14,544	10.5%
Total O&M	67,884	73,511	8.3%
Grand Total	\$ 144,895	\$ 149,392	3.1%

FY21 Rate Resolution

Metro Ordinance: Debt Service Adjustments

Metro Ordinance 50.24:

Whenever MSD's net revenues are less than 1.1 times the debt service on MSD's outstanding revenue bonds for any consecutive six-month period, by order of the Board of MSD, the schedule of wastewater and stormwater service charges shall be amended in order to maintain a 1.10 debt service coverage required by MSD's 1971 bond authorizing resolution provided the aggregate of such adjustments for any 12-month period shall not generate additional revenue from wastewater and stormwater service charges in excess of 7%.

	October 2019 - March 2020	
Revenue	\$	155,258
Operating Expenses		(74,395)
Subordinate Debt Service		<u>(9,972)</u>
Net Revenue	\$	70,891
Bond Principal Maturities	\$	40,380
Bond Interest Expense		<u>46,429</u>
Net Debt Service	\$	86,809
Debt Service Coverage Ratio		0.82
<i>Dollar amounts in '000</i>		

Financial Considerations

Water Utilities
\$1M in Capital Spend

Water Utilities
Capital

15–18 jobs



Hatch 2017, AECOM 2014,
PA Consulting 2009



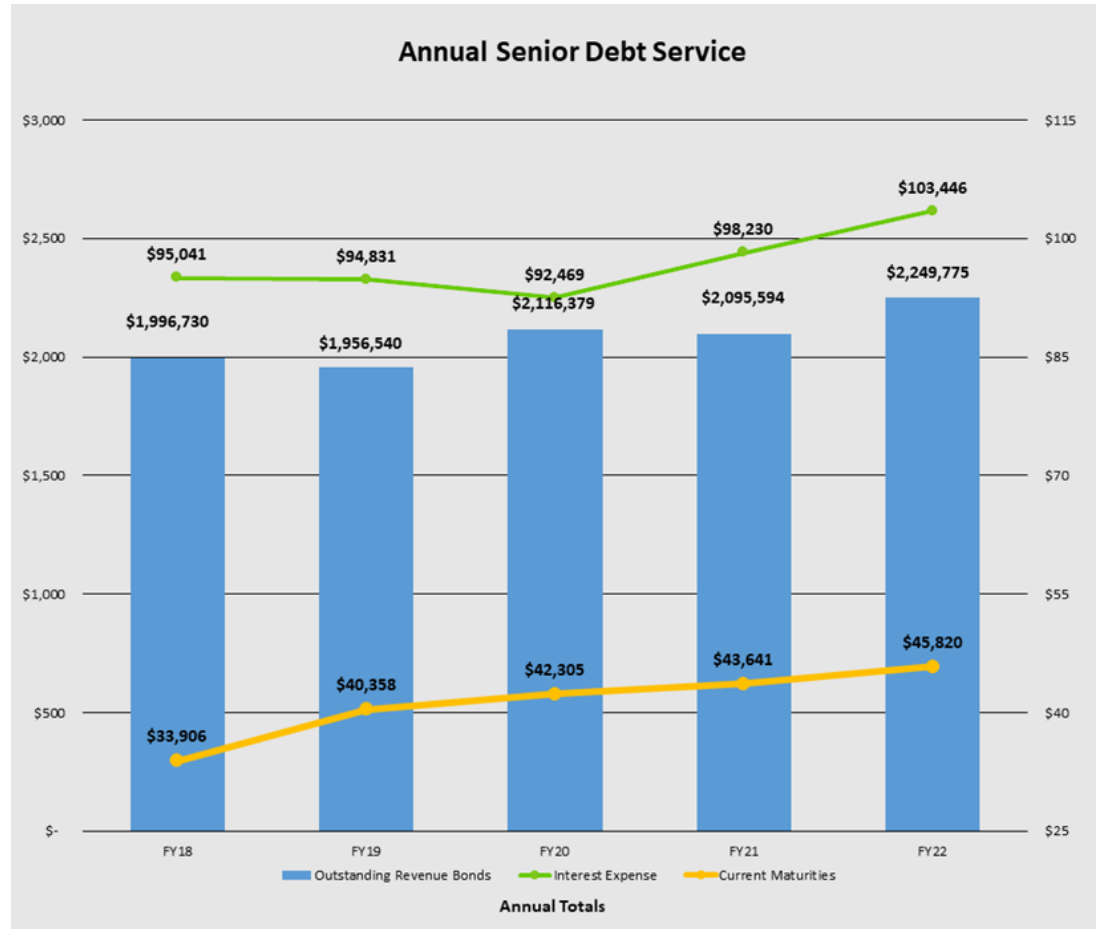
Debt Service Coverage

*Annual debt service increase
\$7M in FY21*

*Combined with flat revenue
or increase operating
expenses, this puts pressure
on coverage and liquidity*

Debt Service Formula

$$\frac{\text{Total Revenue} - \text{Net Operating Expenses}}{\text{Total Debt Service}}$$



Benefits of a Commercial Paper Program

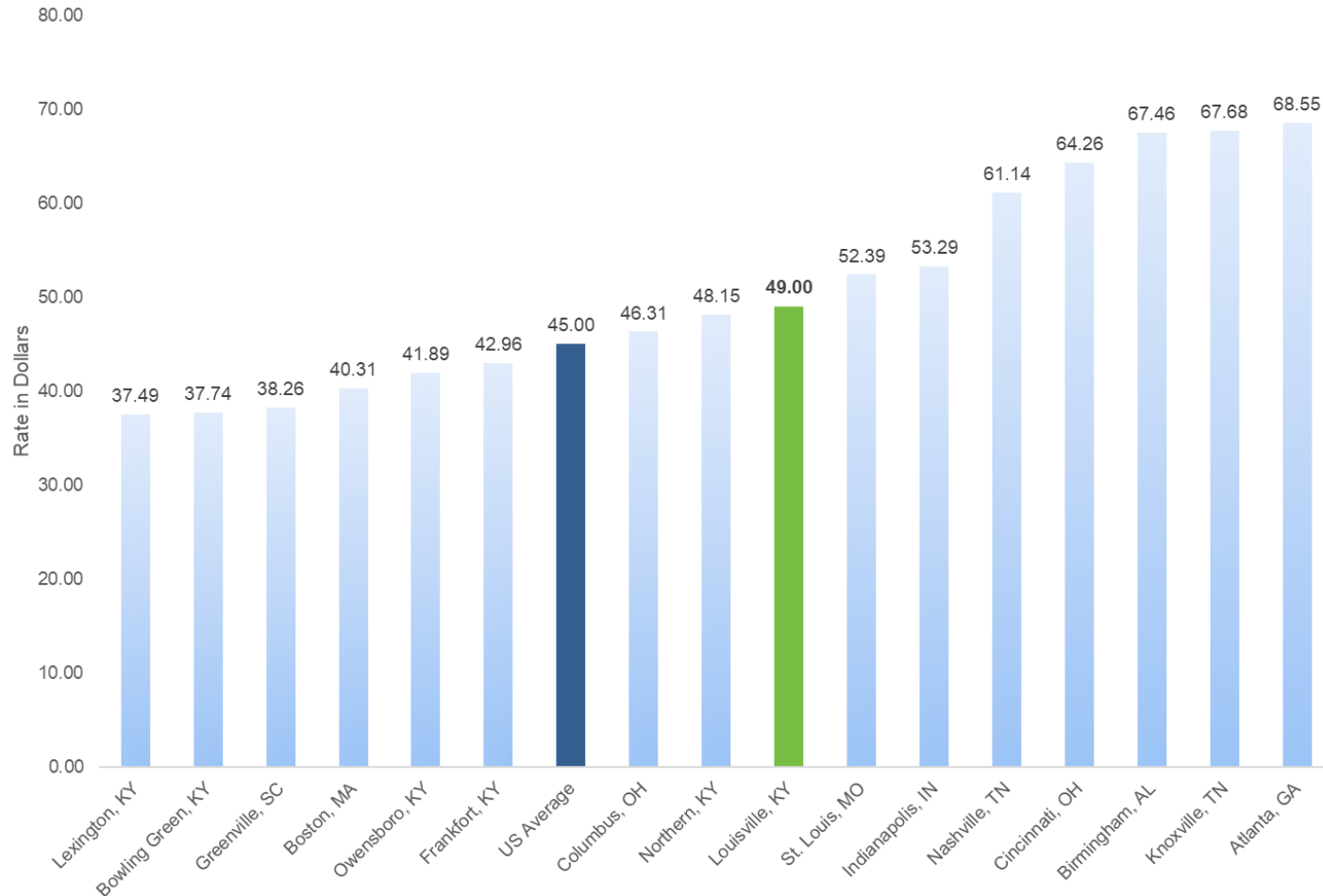
- Eliminates Cost of Carry from 1st Year of a new Revenue Bond.
- \$3.3M in savings over the last 2 years.
- Provides Source of Funds for Emergency Repairs.
- Eliminates “Market Access Risk” on BAN.
- Improves Rating Agency Key Ratios.
 - Debt Service Coverage Ratio
 - Debt to Revenue Ratio

Preliminary Rates for Average Residential Customer

Average Monthly Residential Bill - 4000 Gallons/Month

	8/1/2019	8/1/2020
Wastewater	\$ 48.99	\$ 51.44
Stormwater	10.58	11.11
Total	\$ 59.57	\$ 62.55
Monthly Wastewater Increase	\$ 2.45	
Monthly Stormwater Increase	0.53	
Total Monthly Increase	\$ 2.98	

2020 Monthly Residential Wastewater Charge Comparison based on 4,000 Gal



Emergency Wastewater Rate Assistance Program

- 10% discount on wastewater for households at 150% of poverty level
- Discount will be offered beginning 8/1/20 through 7/31/21
- Discount effective on next bi-monthly bill after approval
- Senior Citizen discount program will continue
- Cannot qualify for both discounts
- Coordinated outreach

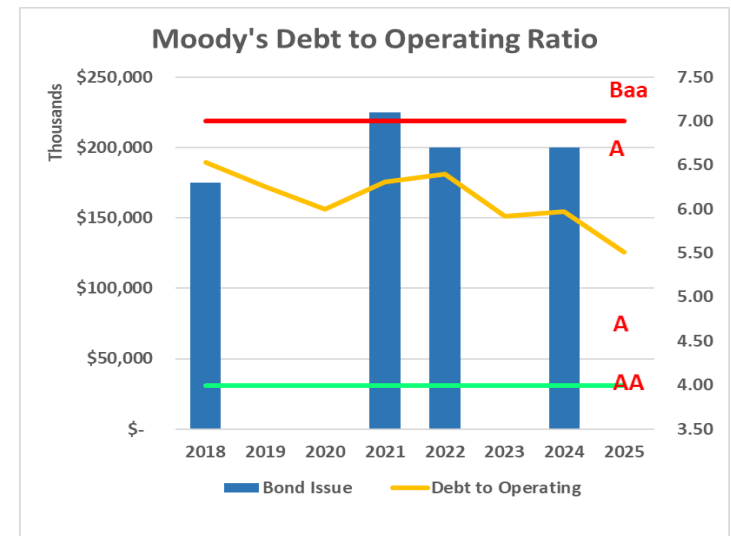
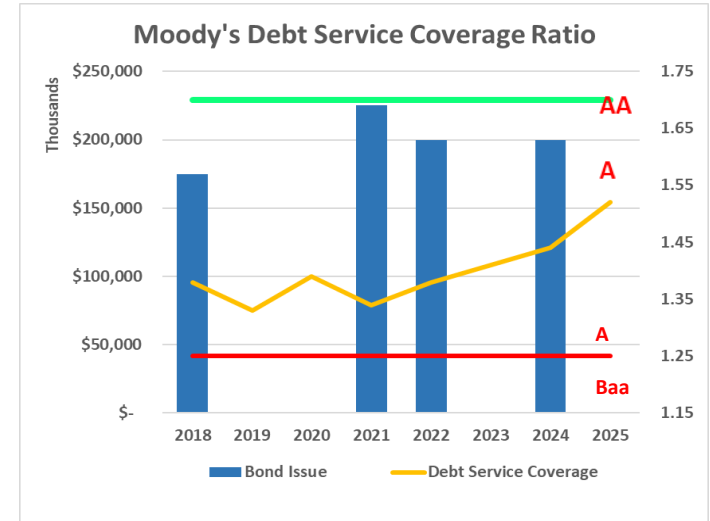
Average Monthly Residential Bill - 4000 Gallons/Month		
	8/1/2019	8/1/2020
Wastewater	\$ 48.99	\$ 51.44
ERAP Discount	-	(5.14)
Stormwater	10.58	11.11
Total	\$ 59.57	\$ 57.41

Bonding Capacity Analysis

FY	5-Year Issuance Capacity
2021	\$225,000,000
2022	180,000,000
2023	-
2024	210,000,000
2025	-
2025 Outstanding CP Balance	255,000,000
Total	\$870,000,000

Assumptions/Notes:

- Bonding capacity constraints:
 - Increase debt service coverage
 - Improve debt to operating ratio
- 30-yr financings at 4.5% fixed interest rates
- Principal structured to maximize bonding capacity
- Assumes renewal of CP liquidity facility in FY 2021
- Assumes new bond issue to take out \$250,000,000+ CP balance is issued in early 2026



System and Community Improvements

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LOUISVILLE



Sustainable Infrastructure Investment is Key to COVID-19 Economic Recovery

Aging Sewer Infrastructure

Sewers

Infrastructure Solutions: Sewers & Facilities

Legend

- Hospitals
- Primary & Secondary Schools
- Colleges & Universities
- Fire Stations
- Police Stations
- Metro Government Offices
- Louisville Free Public Libraries
- Major Employer (>1000)

Jefferson County Boundary

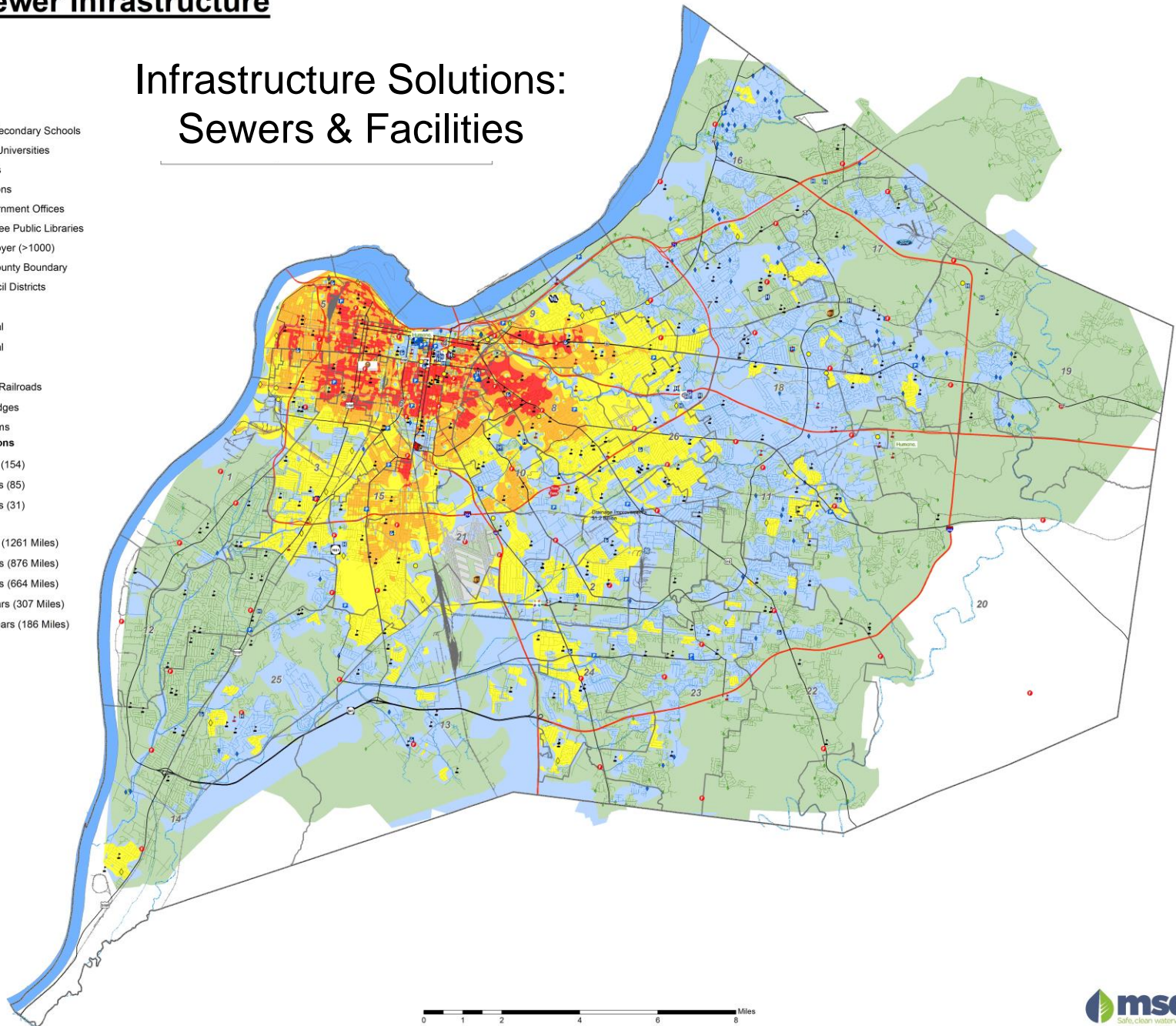
- + Metro Council Districts
- Interstate
- Major Arterial
- Minor Arterial
- Railroads
- Abandoned Railroads
- Railroad Bridges
- Major Streams

Sanitary Pump Stations

- 0 - 25 Years (154)
- 25 - 50 Years (85)
- 50 - 75 Years (31)

Sewer Age

- 0 - 25 Years (1261 Miles)
- 26 - 50 Years (876 Miles)
- 51 - 75 Years (664 Miles)
- 76 - 100 Years (307 Miles)
- 110 - 150 Years (186 Miles)



Capital Project Delivery



Above: Ohio River Interceptor
Top right: Portland Basin
Bottom right: Southwestern Parkway Basin



Before & After Glenmary Springs



Mitchell Hill Road



Top: Ashbrook Gardens Drive

Bottom: John Adam Parkway

Hite Creek WQTC Expansion Waterway Protection Tunnel



Infrastructure Repairs



Broadway sewer - originally built in 1867



Broadway at Preston

Ruptured section in 96" triple ring brick sewer

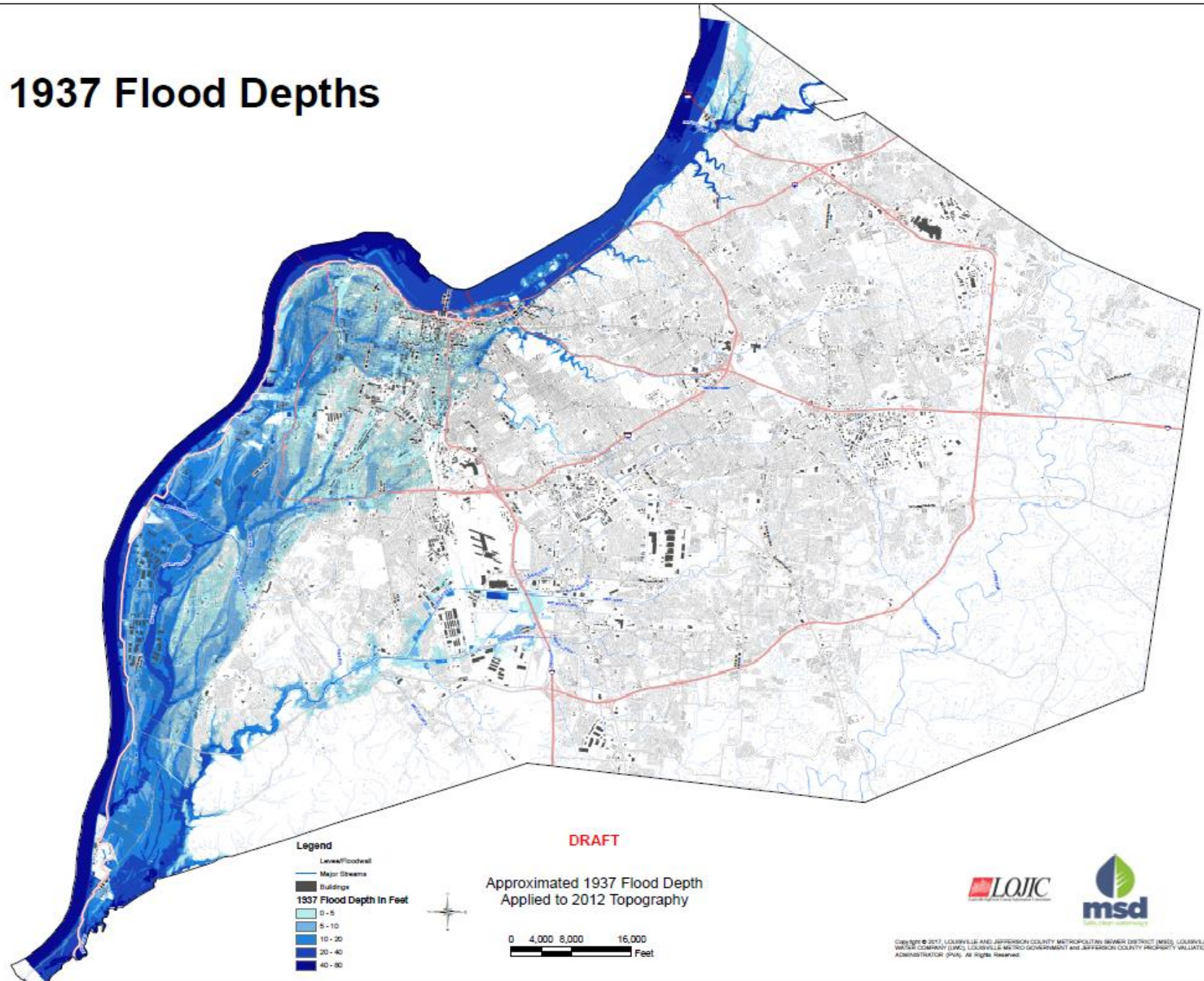




Pump Failures



1937 Flood Depths



Paddy's Run Flood Pumping Station

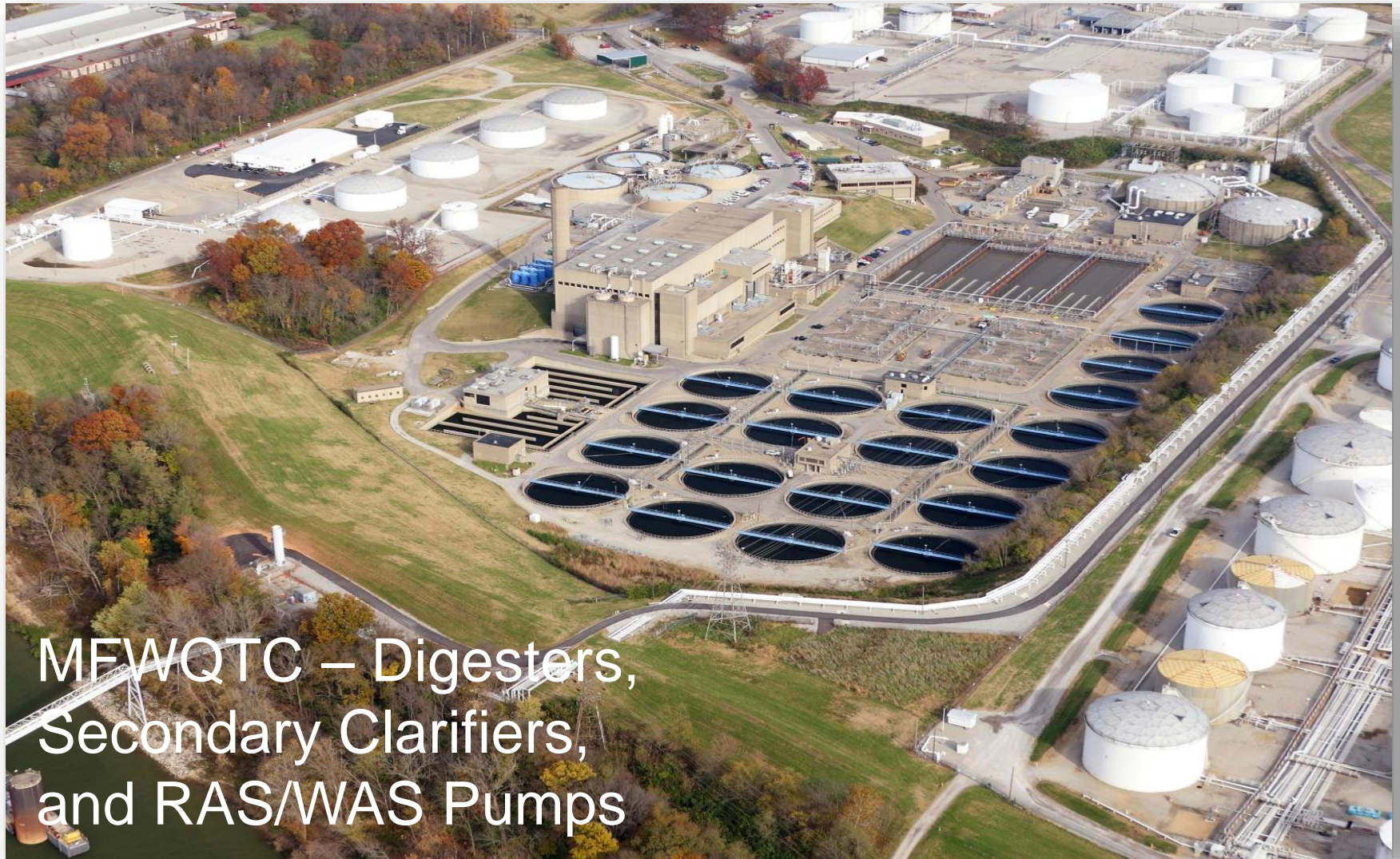


- Constructed in 1953
- Protects 35,000 individuals

Part of the larger system that protects **\$23.8 billion** in property



Wastewater – Morris Forman WQTC



MFWQTC – Digesters,
Secondary Clarifiers,
and RAS/WAS Pumps

Critical Repair and Reinvestment Plan Background - We are the Experts

**Draft for Public Review -
20-Year Comprehensive Facility Plan
MSD's Critical Repair and Reinvestment Initiative**
Volume 1 - Programmatic and Integrating Information



ch2m:

HDR



SA
STRAND
ASSOCIATES



In Association with:
NAC | K.S. Ware & Associates | RKX | Powers Engineering

December 2016



CRITICAL REPAIR &
REINVESTMENT PLAN

Community Conversation

Status Update
June 1, 2017



MSD's Critical Repair & Reinvestment Plan

Addresses Public Health and Safety Risks
Progressive, Transparent, and Accountable



Upgrade Ohio River Flood Protection



Reduce Neighborhood Flooding



Minimize Viaduct Flooding



Upgrade Wastewater Treatment Facilities



Prevent Collapsing Sewers



Comply with Consent Decree

Federal Funding Sources

[McConnell Announces Federal Funding for Louisville Flood Disaster Recovery & Prevention](#)

July 12, 2018

WASHINGTON, D.C. – U.S. Senate Majority Leader Mitch McConnell announced today the U.S. Army Corps of Engineers (USACE) has approved \$3 million in funding for the Louisville Metropolitan Sewer District (MSD). The funding, which will be used for a feasibility study to determine what repairs will need to be made to Louisville’s aging flood protection system, is a result of the *Bipartisan Budget Act of 2018*, which Senator McConnell negotiated and shepherded to enactment. That legislation provided disaster recovery money to states that suffered more than one flood related disaster in the past few years – Kentucky was one of the states eligible.



**Executive Director Parrott and
Senator McConnell in the U.S.
Capitol April, 2018**

“This funding is welcome news for the City of Louisville,” **Senator McConnell said.** “Earlier this year, severe weather hit the city and caused flooding and extensive damage to the region. This announcement will bring much-needed resources to help improve Louisville’s flood control infrastructure and to prevent future damage.”

“The \$3 million in funding for a study of the flood protection system in Louisville, as outlined in the USACE’s recently published Long Term Disaster Recovery Investment Plan list, is the first critical step in providing an overhaul to 65 year old facilities. This system protects thousands of homes and businesses in Louisville when the Ohio River rises, but still depends on 1950’s era technology,” **said Tony Parrott, Executive Director of Louisville Metropolitan Sewer District.** “We are thankful for Leader McConnell’s support to secure the funding to help keep the Louisville Community safe. Louisville MSD looks forward to working with the Leader’s office and the Corps on this study, and implementing the projects that will provide a safe and healthy Louisville for future generations.”

In April, Senator McConnell met with MSD employees, including Executive Director Tony Parrott, to discuss MSD’s work on this issue regarding the severe weather.



Additional Funding Pursuits

- CARES Funding for COVID Reimbursement.
- FEMA Reimbursements.
- Future Stimulus Funding of “Shovel-ready” projects and Reimbursement of Revenue Losses.
- Nationwide Utility Push for Affordability Programs Funded Federally – Like LIHEAP.
- Applicable Grant Opportunities (Where we have the Capacity to Match Funds).
- SRF & WIFIA low interest loan programs.

QUESTIONS?