

Wet Weather Team
Stakeholder Group Agenda
December 7, 2022
9:00 a.m. – 10:30 a.m.
In-person with a virtual option

9:00 – 9:10 Welcome & Intro, Roll Call, Ground Rules, Purpose
Clay Kelly, Strand Associates

9:10 – 9:30 Overview of Recent Developments at MSD
Tony Parrott, MSD Executive Director

9:30 – 9:50 IOAP and Capital Program Update
David Johnson, MSD Chief Engineer
John Loechle, MSD Engineering Director
Brandon Flaherty, MSD Engineer III

9:50 – 10:10 Project-Specific Updates
Real Time Control System
Brian Bingham, MSD Chief Operations Officer
Marc Thomas, MSD Deputy Chief of Operations – Vertical Assets
3 Forks Beargrass Creek Study
Wolffie Miller, MSD Infrastructure Planning Program Administrator
Wes Sydnor, MSD Chief of Government and Public Affairs

10:10 – 10:30 Final Questions, Stakeholder Check-in, Observer Comments, Wrap-up and Adjourn
Clay Kelly

Meeting Summary

Wet Weather Team Stakeholder Group Meeting

December 7, 2022

The Wet Weather Team (WWT) Stakeholders, chartered by the Louisville and Jefferson County Metropolitan Sewer District (MSD), met on December 7, 2022, in-person and via video conference. The objectives of the meeting were to:

- Provide an overview of recent developments at MSD

Welcome

Clay Kelly of Strand Associates, Inc.[®] (Strand) opened the meeting by welcoming everyone and going over the logistics and ground rules that will be used for this meeting, which is the WWT's first hybrid meeting. Clay noted that all attendees are veterans of these meetings and that the usual ground rules apply to this meeting, the same as all previous meetings. The most significant change would be monitoring the in-person attendees and the virtual attendees for raised name tents or raised hands to indicate a desire to speak, to be sure no one is overlooked.

Overview of Recent Development at MSD

Tony Parrott, MSD Executive Director, opened this topic by saying MSD brings value to its customers by providing three utilities (wastewater, drainage, and flood protection) under one roof. As growth associated with distilleries and battery manufacturing continues, MSD has been coordinating with state and local authorities to meet and support the economic needs of the community. The efficiencies that come from combining services under one organization has allowed MSD to keep rates competitive. Currently, MSD's rates are only slightly higher than the national average.

MSD's budget is largely consumed by regulatory-required projects. Approximately 70% of Fiscal Year 2023 (FY23) and 83% of the five-year capital improvement budgets will be devoted to these regulatory-required projects. This does not leave room for other priorities, but negotiations with regulators have allowed MSD's 2nd Amended Consent Decree to incorporate health and safety priorities like Asset Management, Critical Interceptor Rehab, Paddy's Run, and Biosolids at Morris Forman. MSD's goal is to manage the affordability of their rates by keeping annual rate increases below the 7% threshold (6.9% is the highest amount MSD's Board can authorize without Louisville Metro City Council approval).

A stakeholder asked how projects related to the quality of local streams are progressing. Tony responded by saying that a lot of projects are underway, and more are planned. MSD is seeing improvements in the streams.

Another stakeholder asked for an update on what projects are happening at Morris Forman WQTC. Brian Bingham, MSD Director of Operations, said that the Morris Forman WQTC has multiple projects happening at all times. The biggest project currently underway is the improvements to the solids handling systems, which will increase MSD's ability to control odors in addition to improving permit compliance.

Tony added that MSD has been focused on odor issues across their entire service area. MSD's "clAIRity Program" allows residents to report odors online and is working well. MSD continues to make upgrades to their infrastructure to better control odors.

Two stakeholders commended MSD on the clAIRity program. One asked whether MSD had a similar program targeted at businesses. Tony confirmed that MSD does have such a program and works with business to control odors. Brian added that MSD is challenged by a lack of a central list of businesses and appropriate contacts, which make it difficult to provide outreach.

Meeting Summary
Wet Weather Team Stakeholder Group Meeting
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A stakeholder asked whether the odors from sewers were methane gas that was flammable. Brian explained that odors are more of a nuisance in nature as opposed to presenting safety risks. They are caused by hydrogen-sulfide that is too diluted to burn or cause physical harm. Brian continued by saying that odors are unacceptable and MSD's multi-pronged approach to address the challenge is helping to minimize odors when possible.

Integrated Overflow Abatement Program (IOAP) and Capital Program Update

David Johnson, MSD Chief Engineer, and John Loechle, MSD Director of Engineering, provided an overview of several initiatives. David shared that regulators are very pleased with MSD's work in Bullitt County, so far, and provided a reminder that MSD operates Jefferson, Bullitt, and Oldham Counties as separate enterprises. John explained that the hydraulic modeling done by Clemson University resulted in design efficiencies for the Paddy's Run Flood Pump Station.

A stakeholder expressed their disappointment that the modeling could not be done at a local university. John and Brian explained that this kind of physical model build is extremely specialized and that there are only two to three universities in the nation that provide these services. If UofL offered these engineering services, there would be an opportunity to collaborate locally. Another stakeholder asked whether a computer model could have replicated the physical modeling that Clemson University performed. John shared that computer modeling is done initially for scaling but cannot replace physical modeling at the current level of technology.

Project-Specific Updates

Marc Thomas, MSD Deputy Director of Operations, presented MSD's Real-Time Control (RTC) monitoring and control system to the WWT. Marc explained that MSD began developing the system in 2006 and continually improves it. The system is now fully automated and managed through modeling software designed to control the flow of wastewater throughout the county.

A stakeholder requested that MSD update their "red and green" warning system for overflows. Brian said that MSD is exploring how to improve that system without making it overly complicated.

Wolffie Miller, MSD Infrastructure Planning Program Administrator, provided an overview of the USACE Three Forks Beargrass Creek Ecosystem Study. Wolffie noted that the study is complete, but no federal money has been awarded yet, and local partners need to come together to form partnerships and fundraise. Until then, MSD is continuing to coordinate with USACE and follow their lead as support is garnered from potential non-federal sponsors. MSD is eager to partner with the City and USACE through qualifying in-kind services and on property owned by MSD, where the implementation aligns with MSD's mission.

A stakeholder observed that it would seem to be a good return on investment if all the local sponsor had to do was put up 5% of the project cost. Wolffie clarified that MSD could not be responsible for funding all the infrastructure and land purchases without other project partners. Of the sites identified, MSD only has 4% of the acreage compared to other partners. If more land is donated (rather than purchased), the overall project cost as well as 35% non-federal sponsor share will decrease as well.

Another stakeholder asked whether the plan prioritized areas where improvements should be made to achieve the most benefit for the least cost. Wolffie responded by saying that the data exists to do prioritization, but the question often comes down to feasibility of acquiring properties in order to implement solutions.

A stakeholder encouraged MSD to begin implementing the plan in stages that would attract partners as others saw progress being made. Another stakeholder offered that Metro Council could help by providing credit for the properties Louisville Metro owns.

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Several stakeholders asked what could be done to move the plan toward implementation. Wolffie responded by asking them to contact their Congressional delegation and professional networks for funding. Local advocacy, fundraising, and partnership agreements will be essential for leveraging the federal funding to make this plan a reality.

Observer Comments, Wrap-Up, and Adjournment

Clay closed the meeting by thanking everyone for their participation and wished them a safe and happy holiday season.

Meeting Materials

- Agenda for the December 7, 2022, WWT Stakeholder Group Meeting.
- Copy of the presentation slides—Overview of Recent Developments at MSD, IOAP and Capital Program Update; and Project-Specific Updates.

Meeting Summary
Wet Weather Team Stakeholder Group Meeting
December 7, 2022

Meeting Participants

Wet Weather Team Stakeholders (Present)

Susan Barto, Mayor of Lyndon
Stuart Benson, Louisville Metro Council, District 20
Deborah Bilitski, Waterfront Development Corporation
Mark French, University of Louisville Speed School of Engineering (virtually)
Arnita Gadson, West Jefferson County Community Task Force (virtually)
Corinne Greenberg, The Chemours Company (virtually)
David James, Louisville Metro Council, District 6
Kurt Mason, USDA Natural Resources Conservation Service (retired) (virtually)
Jody Meiman, Louisville Metro Government, Director of EMA/MetroSafe
Lisa Santos, Irish Hill Neighborhood Association
Andrew Condia, Senator Mitch McConnell's Office
David Wicks, Get Outdoors Kentucky; Jefferson County Public Schools (retired)
Ward Wilson, Kentucky Waterways Alliance
Nicole Yates, Passport Health (virtually)

Wet Weather Team Stakeholders (Not Present)

Steve Barger, Labor (retired)
Billy Doelker, Key Homes
Rick Johnstone, Deputy Mayor, Louisville Metro Mayor's Office (retired)
Jeff O'Brien, Louisville Metro Government, Director of Louisville Forward
Rocky Pusateri, Elite Built Homes
Tina Ward-Pugh, Louisville Metro Government, Resilience and Community Services, Office for Women
Mary Ellen Wiederwohl, Accelerator for America, President & CEO

Wet Weather Team MSD Personnel (Present)

Tony Parrott, MSD Executive Director
Angela Akridge, MSD Chief Strategy Officer
Brian Bingham, MSD Chief of Operations
David Johnson, MSD Chief Engineer
John Loechle, MSD Director of Engineering

Technical Support

Clay Kelly, Strand Associates
Paul Maron, Strand Associates

Meeting Observers

Karina Henson, MSD
Stephanie Laughlin, MSD
Wolffie Miller, MSD
Nicole Refolo, MSD
Wesley Sydnor, MSD
Marc Thomas, MSD
Nala Mason

Wet Weather Stakeholder Update

James A. Parrott, Executive Director
December 7, 2022



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RESILIENT LOUISVILLE



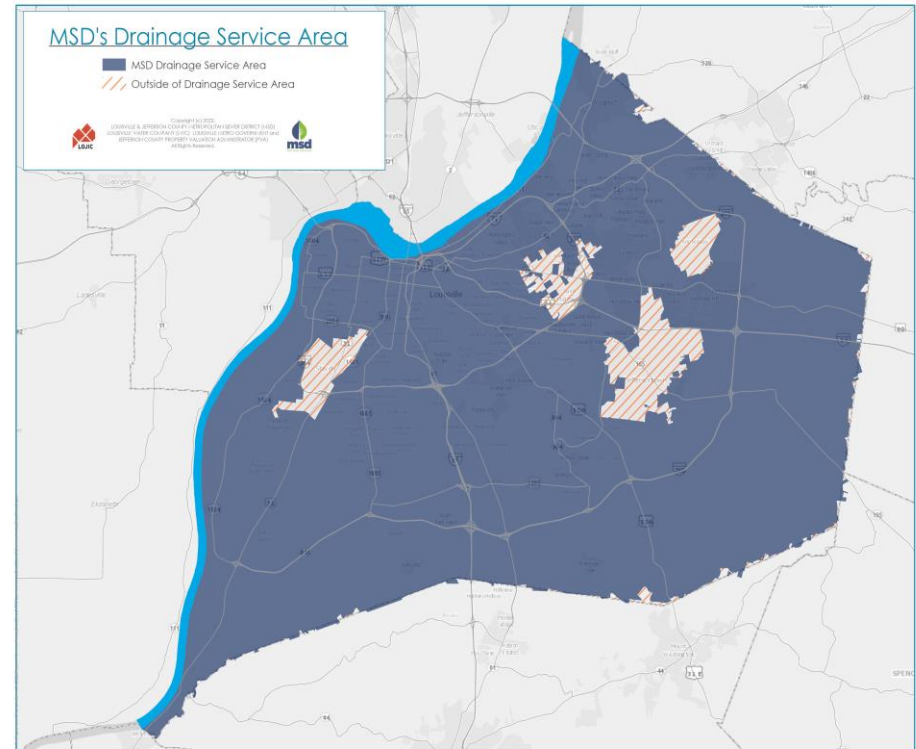
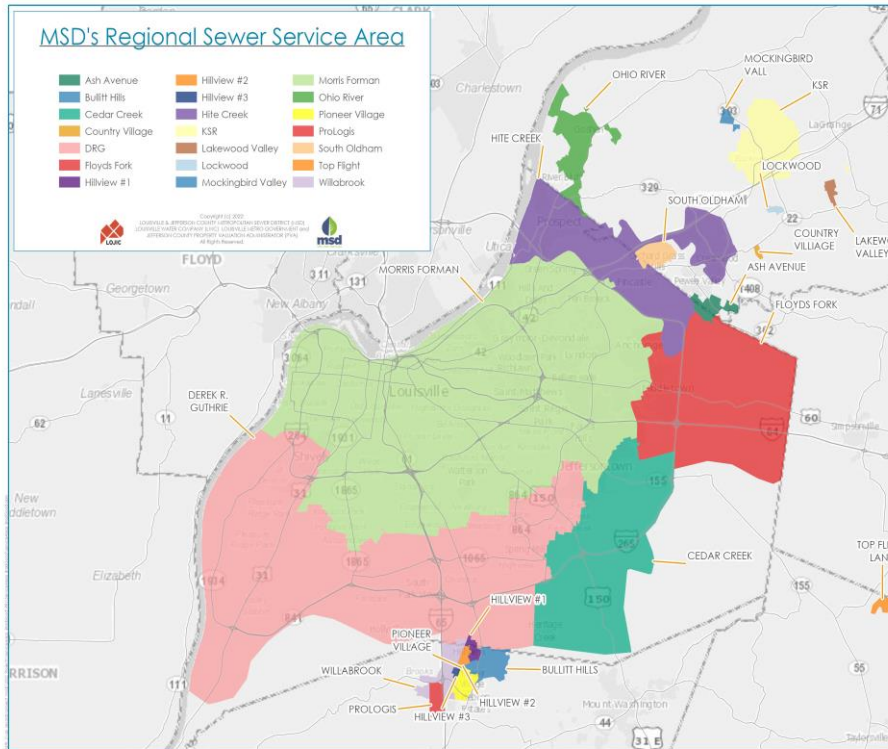
Image Credit: Louisville Metro Government

MSD - 3 Utilities in One

We Share “Back Office Functions” to Provide Services in a More Efficient, Non-Redundant Manner



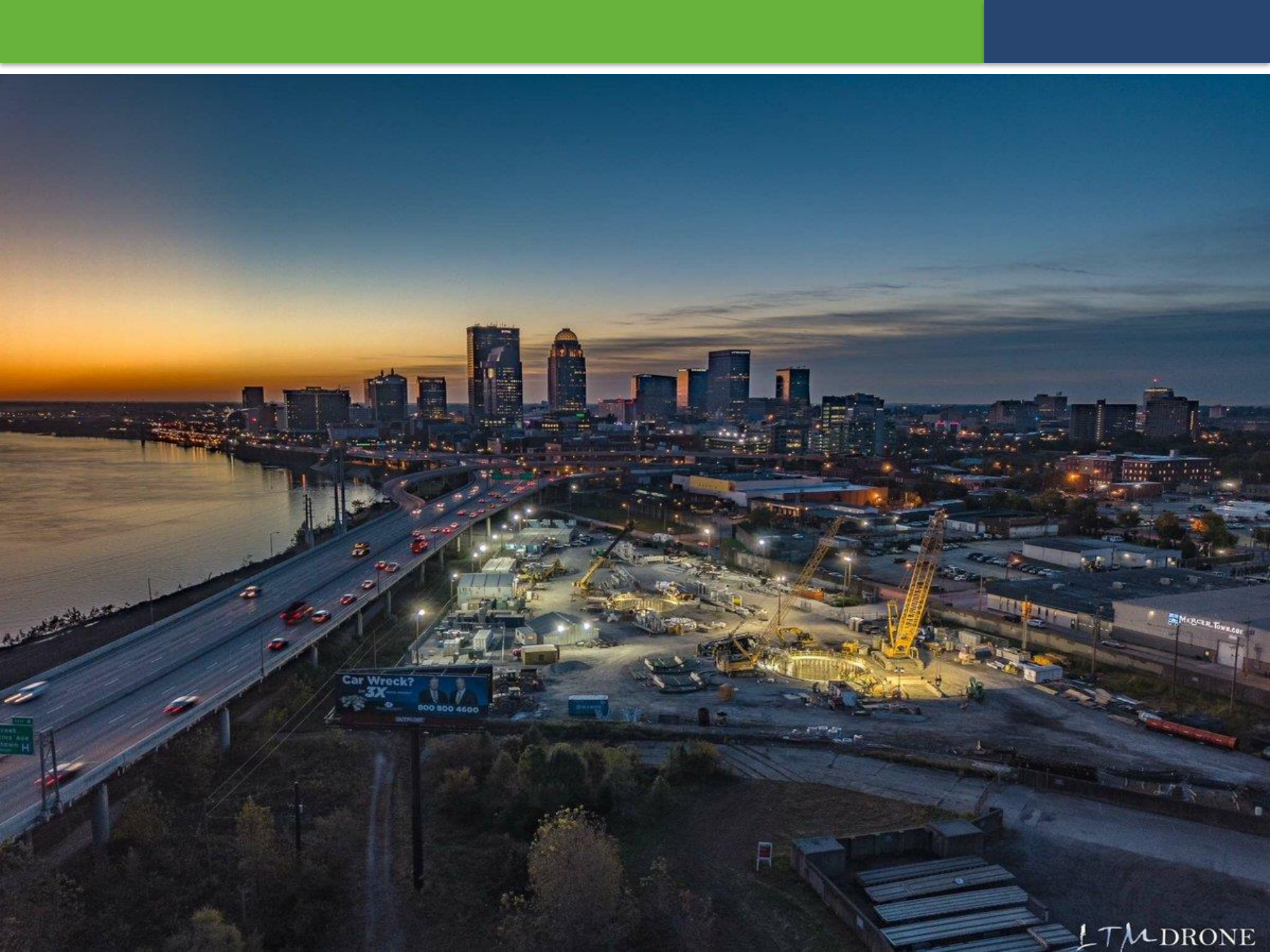
Service Area Operations



Regionalization Update

- MSD acquired and operates wastewater system in Oldham County
- MSD acquired the Bullitt County Sanitation District on November 30, 2021
- In Spencer County, MSD began operations of the “Top Flight” system and treatment plant. Will finalize acquisition in 2022
- Where is growth expected to occur – how can MSD be prepared to support those needs with other regional utilities?
- How do we respond to the flourishing distillery/bourbon industry?
- Where are other economic growth needs as we recover from COVID?





Remaining LTCP Project

**Waterway Protection Tunnel Project
is complete!**







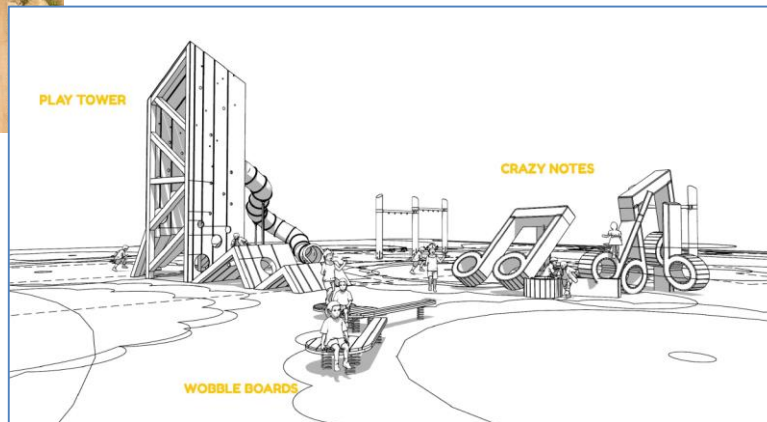
Maple Street Grant Outcomes

- \$9.75 million property acquisition project approved in 2012
- 75% Federal, 12% State, 13% Locally Funded
- 116 of the 128 properties were purchased and the buildings were removed from flooding!
- Over 18 acres of open space



Maple Street Future Land Use

- FEMA Deed restrictions limit uses
- Partnering with Louisville Metro Parks to create a park
- Playground is proposed to have a music theme





Future Site of Your Neighborhood Park

Bringing nearly 20 acres of green space and recreational opportunities to the Maple Street area

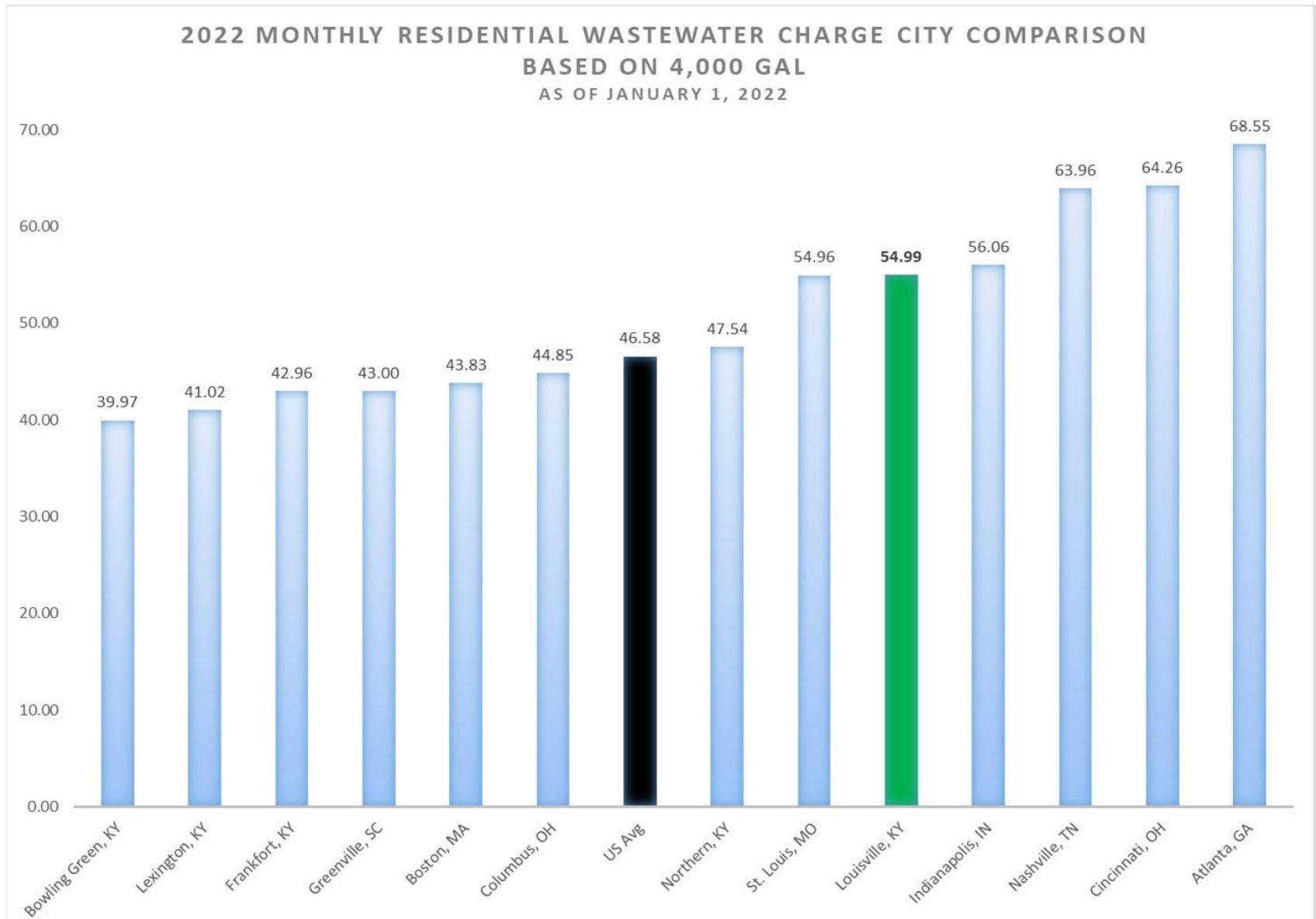


Want to learn more? Visit ParksAllianceofLouisville.org/maple-street-project

Financial Benchmark



Area Wastewater Rate Comparison



Customer Assistance Programs

- Senior Citizen Discount: 30%, estimated at \$1,196,000 in FY23
- EWRAP Discount: 30%, estimated at \$500,000 in FY23

EWRAP Discount - Effective 10/1/22		
Jefferson County Service Area	8/1/2021	10/1/2022
Wastewater	\$ 54.99	\$ 57.75
EWRAP Discount	(5.50)	(17.33)
Drainage	11.88	12.47
Total	\$ 61.37	\$ 52.90
Monthly Wastewater Increase	\$ 3.19	\$ (17.33)
Monthly Drainage Increase	0.77	0.59
Total Monthly Increase	\$ 3.96	\$ (16.74)

- \$150,000 contribution to Louisville Water Foundation
- Total MSD-funded FY23 Customer Assistance: \$1,846,000

Capital Improvements



Regulatory Compliance Remains Primary Driver for Capital Improvement Program

70%
FY23 Forecast

Regulatory Program	5-Year CIP	FY23
Consent Decree	\$ 759,366,000	\$ 96,710,000
State Agreed Orders	\$ 50,582,000	\$ 26,200,000
CMOM Program	\$ 50,506,000	\$ 9,541,000
NMC Program	\$ 1,790,000	\$ 510,000
MS4 Program	\$ 10,212,000	\$ 1,963,000
Total	\$872,456,000	\$134,924,000

83%
5-Year Forecast

2ACD and 2021 IOAP Key Outcomes

Waterway Protection Tunnel

Delay final completion deadline due to construction challenges (December 2022)

1

SSDP Schedule

Stagger final completion for the 16 remaining SSDP projects through **2035**

2

Critical Needs

Expedite Morris Forman ***Biosolids & Paddy's Run*** – capital needs offering greater environmental benefits

3

Critical Interceptors

\$70 Million in Critical Interceptor rehabilitation commitments to renew our most vulnerable sewers

4

Asset Management

\$25 Million per year in asset management spending through 2035 (\$125 million per 5-year increments)

5

Critical Interceptor Projects

\$70 Million through completion (Dec 31, 2026)

Critical Interceptor Project	Estimated FY21-FY25 Spending	Completion Date
Buechel Trunk Sewer Rehabilitation	\$3,000,000	12/24
Harrods Creek Force Main Repair	\$8,400,000	12/22
Prospect Phase II Area Sewers Rehabilitation	\$3,000,000	3/23
Broadway Interceptor Infrastructure Rehab	\$24,800,000	Complete
I-64 and Grinstead Infrastructure Rehabilitation	\$16,000,000	7/23
Large Diameter Sewer Rehabilitation	\$8,300,000	12/22
Rudd Ave Sewer Infrastructure Rehabilitation	\$14,400,000	Complete
Western Outfall Infrastructure Rehabilitation	\$16,000,000 (further discussion to take place)	6/24 (unknowns due to flow from distilleries)
Nightingale Sewer Rehabilitation	\$3,000,000	Complete

Epoxy System

- 5,250 LF of sewer coated with Warren Environmental 100% solids epoxy
- Major structural defects were repaired prior to the epoxy application
- Epoxy refills lost mortar and prevent further erosion of mortar joints
- Bricks are locked into place

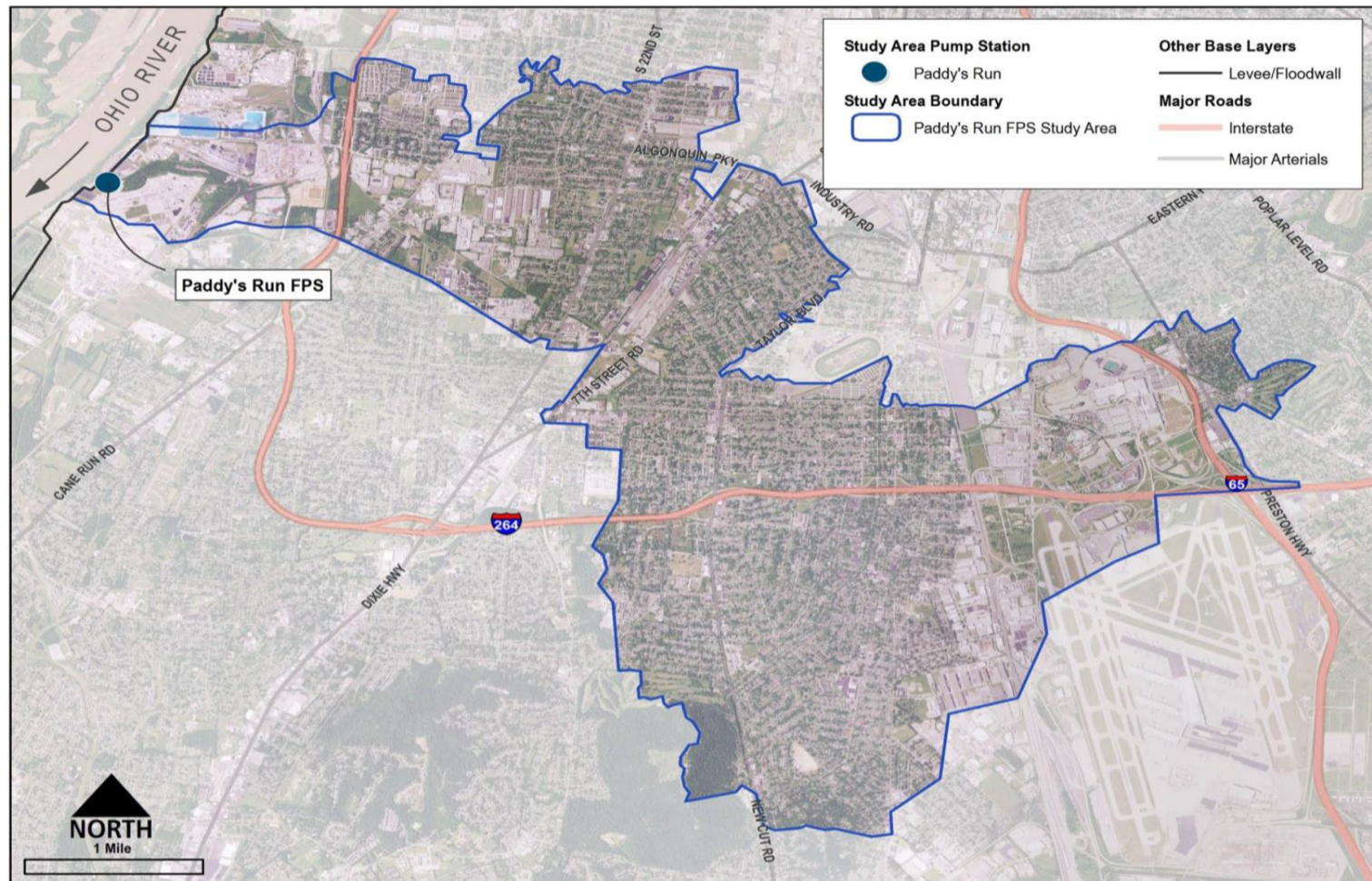


Paddys Run Flood Pump Station (Dec. 31, 2026)

- Originally constructed in 1953
- Protects over 200,000 properties
- Complete replacement with more pumping capacity
- Approximately \$230M



Paddys Run Flood Pump Station Service Area



Odor Abatement Program Overview



Odor Abatement Program

- Odor Causes and Sources related to the MSD System
 - Potential Odor Issues associated with: Catch Basins in Combined Sewer System
 - Water Quality Treatment Centers
 - Pump Stations and Force Mains
 - Dry Weather
- Potential Odor Abatement Solutions
 - Catch Basin Improvements
 - Chemicals (Bioxide, Granular Chlorine, other disinfectants)
 - Increased Water Use or moderate rain events
 - Continued modernizing of facilities and assets
- Community Outreach and Education
 - Clarity Program
 - <https://louisvillemsd.org/odor>

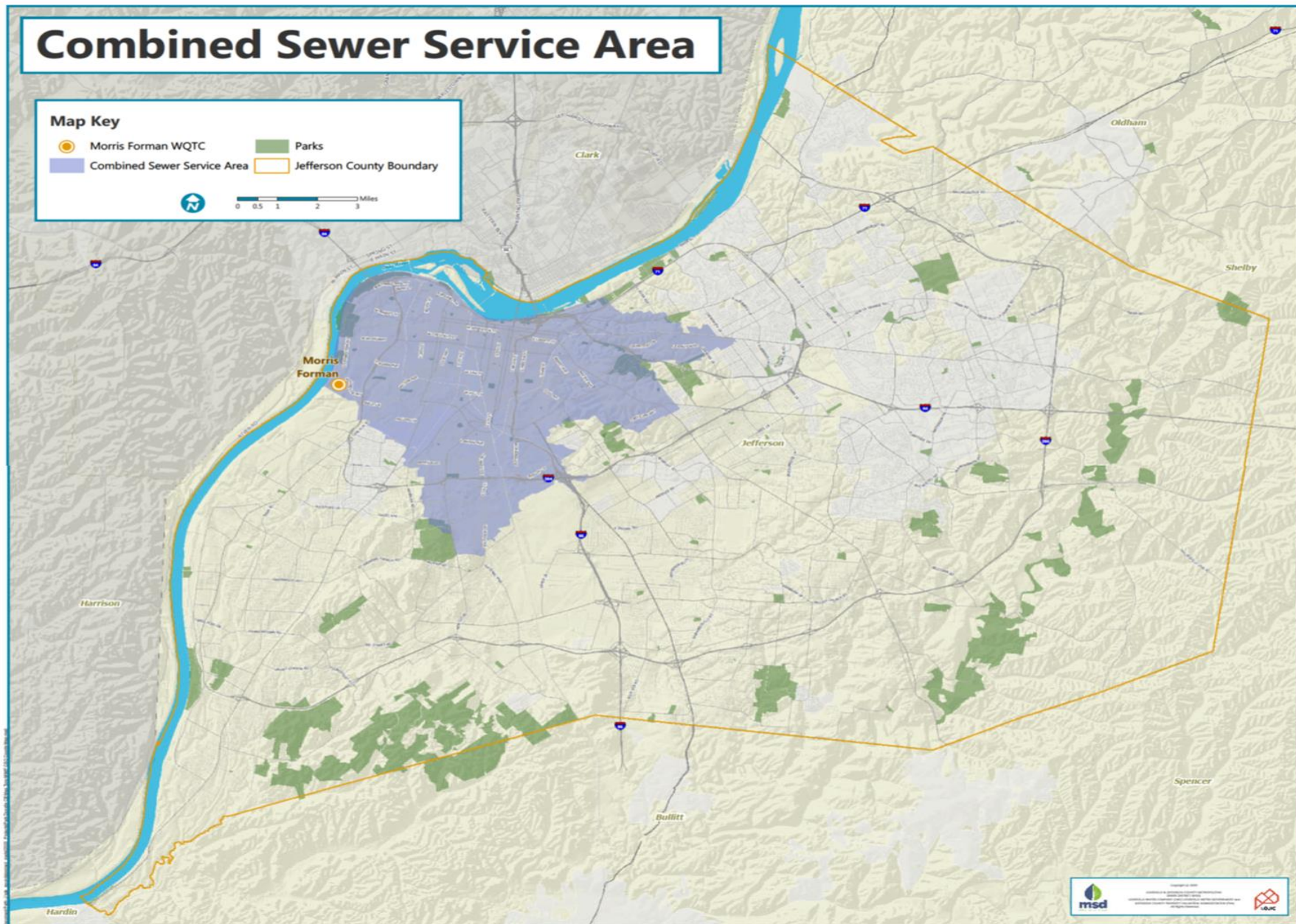
Combined Sewer Service Area

Map Key

- Morris Forman WQTC
- Combined Sewer Service Area
- Parks
- Jefferson County Boundary



0 0.5 1 2 3 Miles



Odor Abatement Update

- Annual Contract for Odor Abatement in the Pump Stations and Force Mains (Bioxide)
- Covered many Odor Sources
- Installed Odor Abatement Processes and Devices at numerous facilities
- Increased Chemical Use at WQTC
- Evaluating recent data to determine how to more effectively abate odor issues
- Improved Communications

QUESTIONS?

Wet Weather Stakeholder

IOAP and Capital Improvements

December 7, 2022



Agenda

- Jefferson County Consent Decree Projects
- Jefferson County non-regulatory projects
- Bullitt County Projects
- Oldham County Projects
- Challenges with the Capital Program
- Questions

Regulatory Compliance Remains Primary Driver

70%
FY23 Forecast

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MS4 Program	\$ 10,212,000	\$ 1,963,000
Total	\$ 872,456,000	\$ 134,924,000

83%
5-Year
Forecast

Remaining SSDP Projects



*Reflects Minor Project Modification Letters submitted November 2022

SSDP Projects

Due December 2025

Critical Interceptor Project	Completion Date
Idlewood In-line Storage	6/23
Kavanaugh Pump Station Improvements Elimination	6/24
Monticello Pump Station Elimination	6/23
Cinderella Pump Station Elimination	12/24 12/30
Leven Pump Station Elimination	9/23
Gunpowder Pump Station In-line Storage Elimination	10/23
Little Cedar Creek Interceptor*	11/24

Been no overflows in over a 3 year window, looks like resolved...

Specific Remedy Projects

- Construct Morris Forman New Biosolids Facility by ***December 31, 2030.***
Expected completion date is 2026. Approximately \$235M
- Construct Paddy's Run Pump Station Capacity upgrade by ***December 31, 2026.***
- Brandon will give us a more detailed updated here in a bit



Critical Interceptor Projects

\$70 Million through completion (Dec 31,2026)

Critical Interceptor Project	Estimated FY21-FY25 Spending	Completion Date
Buechel Trunk Sewer Rehabilitation	\$3,000,000	12/24
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Nightingale Sewer Rehabilitation	\$3,000,000	Complete

Asset Management Program

- Strategic Asset Management plan was submitted on June 30, 2021 as required
- MSD to spend an average of \$25 M a year on asset management projects
- Every five years, MSD must report a spend of \$125 M
- Total spend through 2035 will be at least \$375 M
- In FY 21, MSD spent \$21.1 M
- In FY 22, MSD spent ~~\$29.9 M~~ \$35.9 M

Morris Foreman Correction Action Plan

The Morris Foreman Correction Action Plan includes 26 projects with an approximate cost of \$190 million. MSD has completed 22 of those projects totally \$87 million. The remaining projects are listed below:

Project	Due Date	Completion Date
LG Dryer Replacement	12/31/22	Complete
Sodium Hypochlorite Building Relocation	12/31/23	2/11/23
FEPS MCC& Load Center Replacement	6/30/24	Complete
Sediment Basin Rehabilitation	6/30/26	3/12/24

Jefferson County Non-regulatory projects

- Floyds Fork Interceptor (60% Design)
 - 8 mile long gravity sewer to serve SE Jefferson County
 - Takes flow off of Floyds Fork WQTC to allow for Oldham and Shelby County flow
 - Eliminates Rehl Road Pump Station
 - Coordination with Parklands
- Project DRI
- Canal Street Floodwall
- Southwestern Sluice Gate Chamber Gate replacements
- CMF and MFWQTC Entrance Improvements

Bullitt County Agreed Order

Initial Phase (May 30, 2022)

All tasks were submitted on time

Program/Project	Completion Date	Project Manager(s)
Sewer Overflow Response Program	February	Dan French/Heather Dodds
Capacity Assurance Plan	May	Dan French/Heather Dodds
Date flow will be diverted from Hunters Hollow Pump Station to Mud Lane Interceptor	April	Joey Ashby/Jacob Mathis
A schedule to install Supervisory Control and Data Acquisition (SCADA)	April	Marc Thomas
Facility Plan Submittal (Due date July 1, 2022)	July	Stephanie Laughlin/Wolffie Miller
Schedule and Concept Plan for Hillview Two WWTP elimination	March	Stephanie Laughlin/Wolffie Miller
Schedule for interim plan and improvements of Pioneer Village, Hillview Three, Willabrook, and Prologis WWTP's	April	Stephanie Laughlin/Wolffie Miller
Plan for improvements or elimination of Big Valley WWTP	May	Mike Brazel
Schedule for pump station improvements	April	Mike Brazel

Bullitt County Projects (Capital)

- Bigwood Pump Station Elimination (Starting Construction)
- Triangle (formerly Hunters Hollow) Pump Station and Force Main (Design Phase)
- Bullitt Hills WQTC Screening (Design)
- Facility Planning
- Flow monitoring
- Sewer line assessments (looking for line failures and points of stormwater inflow)
- Willabrook Elimination Study
- Emergency Repairs at Prologis Treatment Plant
- Disinfection at all plants.

Oldham County Projects (Capital)

- Ash Avenue Interceptor
 - Eliminates Ash Avenue Treatment Plant
 - Agreed Order project
 - Easement Delays
 - Construction has been awarded
 - Due date is June 30, 2024
- Ohio River Service Area Pump Station Rehabilitation
- Oldham County Package Plant Demolition
- Facility Planning

Increased CIP Risks Noted for FY23

- Higher Bid Prices due to global market conditions
- Lack of Bidders = reduced number of respondents, if any
- Extended Schedules due to supply chain issues
- Easement acquisition & Stakeholder approval



Questions?

Paddy's Run Flood Pump Station Capacity Upgrade Progressive Design- Build Project

Update

12.7.2022



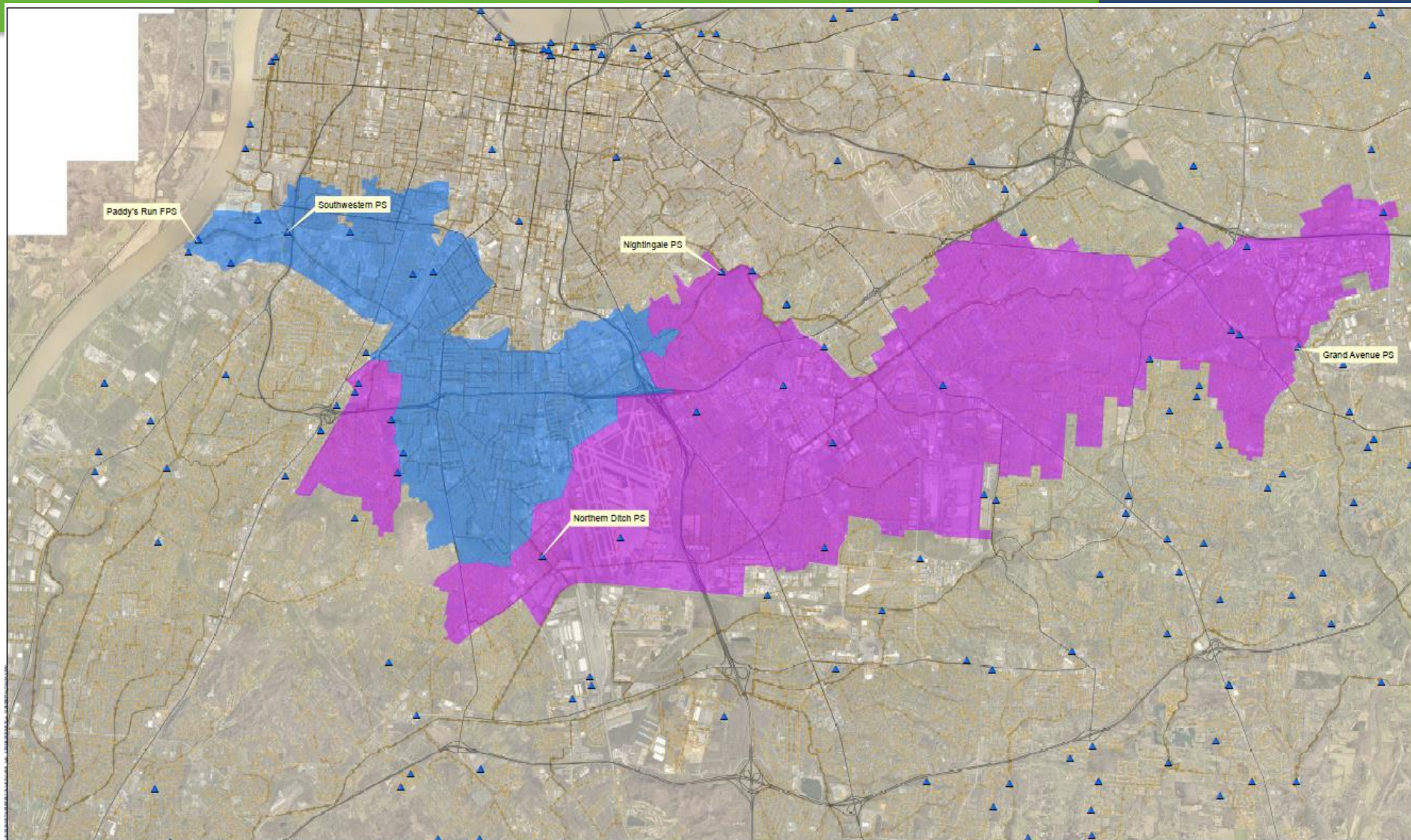
Project Summary

- This project will include, but is not limited to:
 - a new flood pump station with a total pumping capacity of 1,900 MGD
 - new flood pumps, motors, and discharge pipes
 - installation of all the necessary electrical, mechanical, and instrumentation components
 - required building requirements
- MSD is utilizing a Progressive Design-Build delivery method for this project

Project Summary

The project is being delivered in two stages:

- 1) Stage 1: Design through 100%, permitting, construction planning, and the development of a Guaranteed Maximum Price (GMP) proposal(s)
- 2) Stage 2: RPR services, construction, start-up and commissioning, and post-construction services



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Paddy's Run Service Area

0 3,000 6,000 9,000 12,000 15,000 18,000 21,000 24,000 Feet

Map Created By: HERITAGE ENGINEERING, LLC

LEGEND

- | | | | |
|--|-----------------------------|--|------------------------------|
| | Pump Station | | Major Roads |
| | Stormwater Drainage Area | | Sanitary Sewer Pipe Diameter |
| | Sanitary Sewer Service Area | | 0" - 8" |
| | | | 8" - 24" |
| | | | 24" - 220" |



Project Location



Physical Model

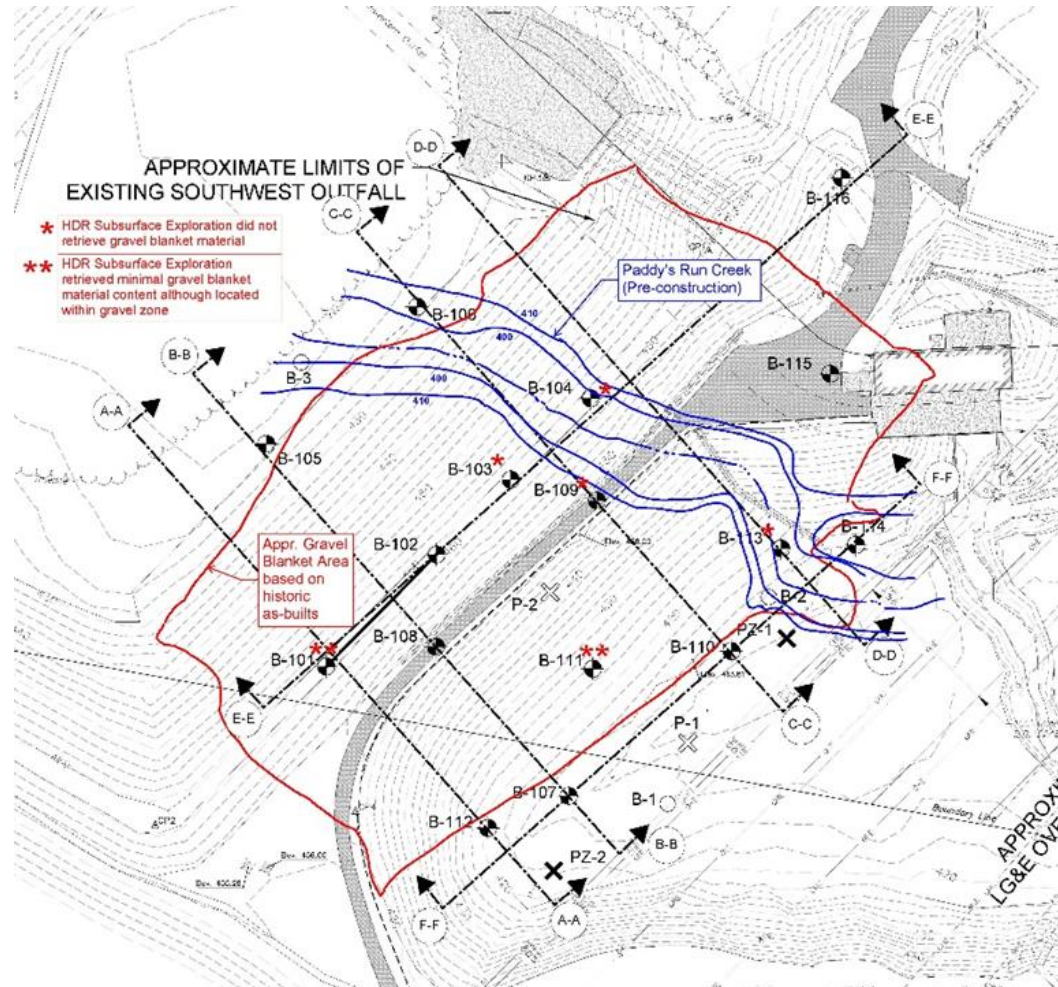
- Clemson Engineering Hydraulics (CEH) constructed scale models of the wet well, influent channel, and discharge structure
- The team visited CEH on July 7, 2022 to witness the scale model testing
- Subsequent model runs have been conducted by CEH that has resulted in design efficiencies

Physical Model

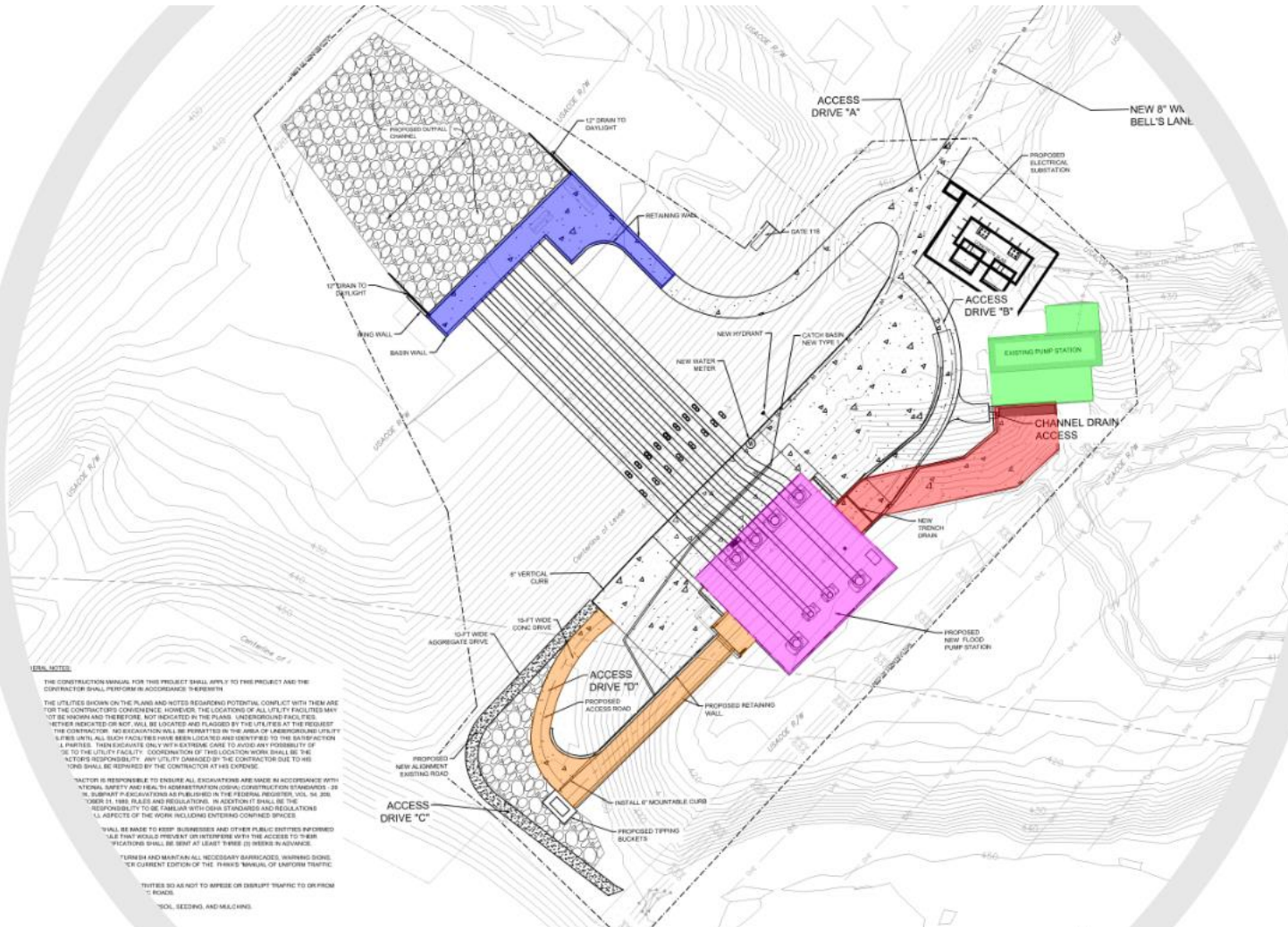


Subsurface Exploration

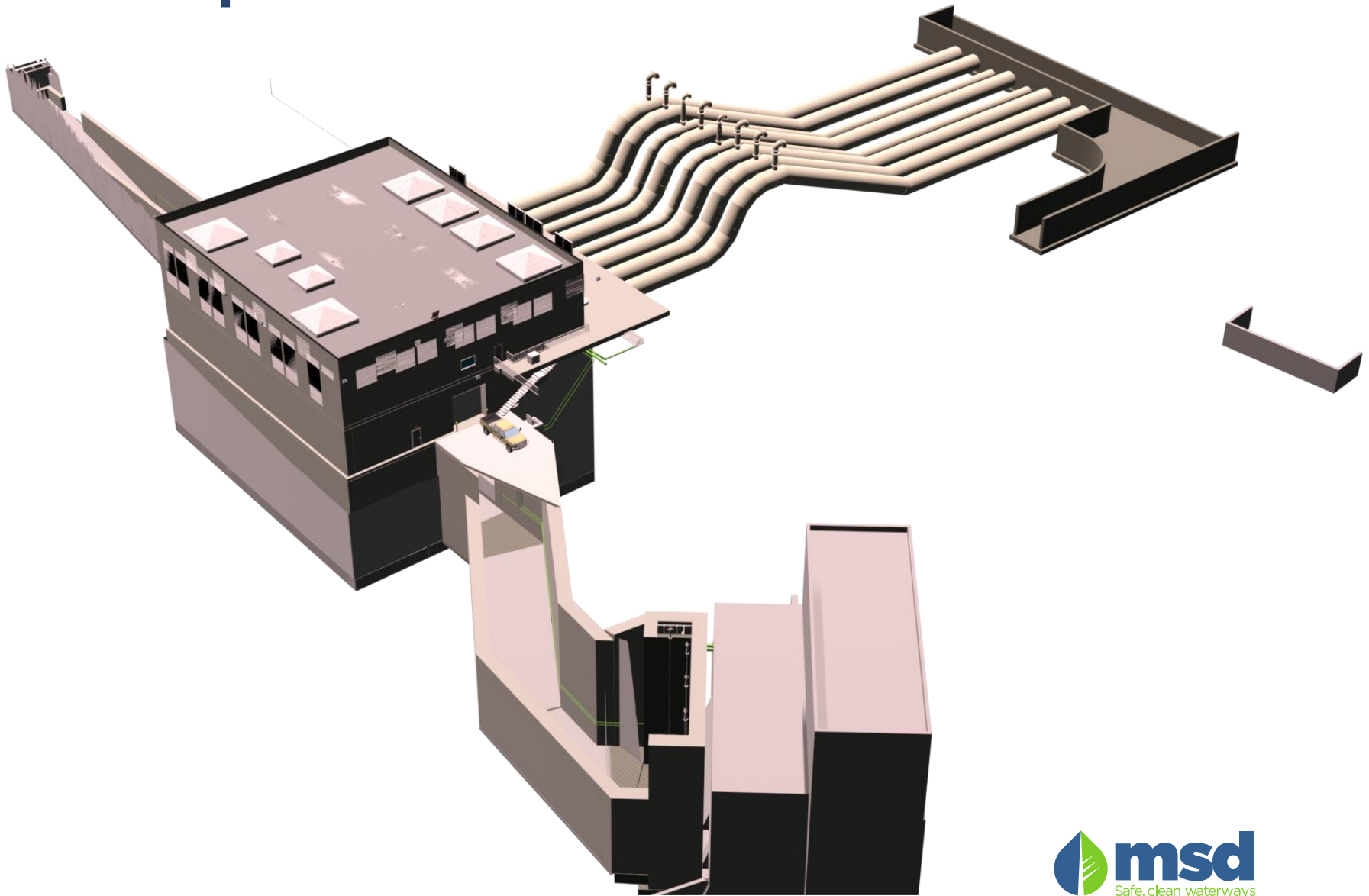
- 16 borings & 2 piezometers
- Confirmed soil properties
- Found gravel layer between levee and foundation was discontinuous and filled with fines
- Confirmed relief wells not functioning



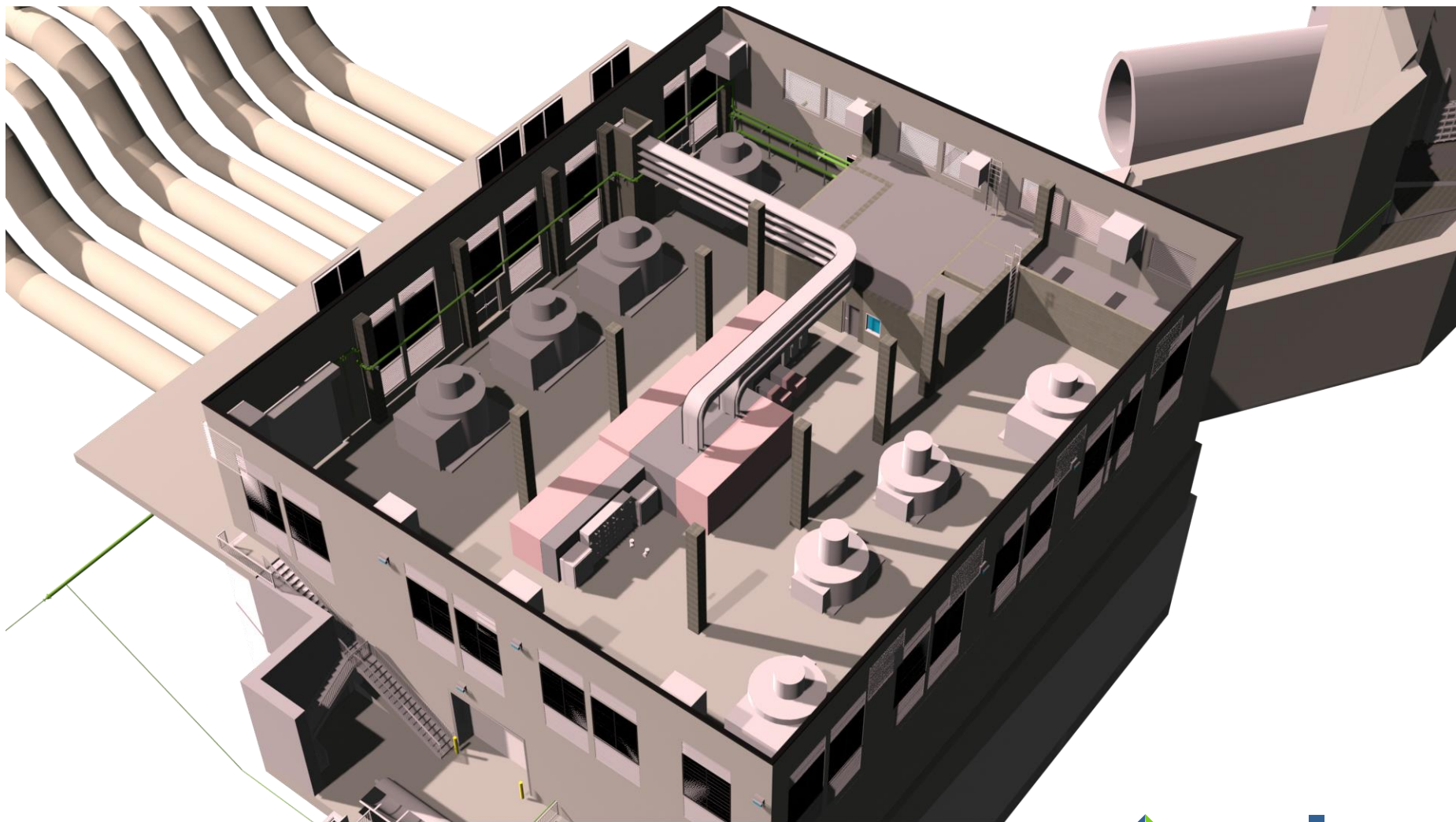
30% Update



30% Update



30% Update



Project Budget

- Stage 1 Amount: \$8,900,000
 - Includes Design to 100%
- Stage 2 Estimate: \$233,280,046
 - Includes 20% contingency (~\$36M)
 - Unforeseen levee improvements (~\$61M)

Project Schedule

- Projected 60% Submittals
 - Pump/Motor Package December 2022
 - Phase 1 408 December 2022
 - Remainder of Design January 2023
- Bid Packages Advertisement:
 - Pump/Motor Package January 2023
 - Early Works Package (EWP) January 2023
 - Balance of Work Summer 2023
- Projected 90% Submittal April 2023
- Projected Start of EWP Construction Summer 2023
- Projected Substantial Completion December 10, 2026
- Consent Decree Deadline December 31, 2026

Questions?

Three Forks of Beargrass Creek

Ecosystem Restoration Feasibility Study

December 7, 2022



Leveraging Federal Funding

- Authorized through the USACE General Investigation fund
- **3-year, up to \$3M ecosystem restoration feasibility study** for the three Beargrass Creek watersheds
- Louisville was selected as **one of only six projects to be funded among a national pool** of applicants, and the only ecosystem restoration project selected.
- This funding mechanism has also been used to restore portions of the Everglades and LA River.
- MSD is contributing up to \$1.5M in value to the project through a combination of funding and in-kind services.



USACE Ecosystem Restoration Feasibility Study



Goals

- To improve the **quality and connectivity of stream and riparian area habitat** to foster safe, clean streams in the community.
- Produce a plan to identify restoration alternatives that will **improve the ecological form and function of the Beargrass Creek Watershed**, which contains the South, Middle, and Muddy forks.

USACE Ecosystem Restoration Feasibility Study

Opportunities

- Increase native species richness / abundance of riverine, wetland, and riparian communities
- Increase wetland habitat in sync with unique localized conditions
- **Increase stream geomorphic and habitat function**
- Increase acres of riparian habitats
- **Realign / move MSD infrastructure to support habitat restoration**
- Provide a clean, safe place to play and live
- Improve water quality



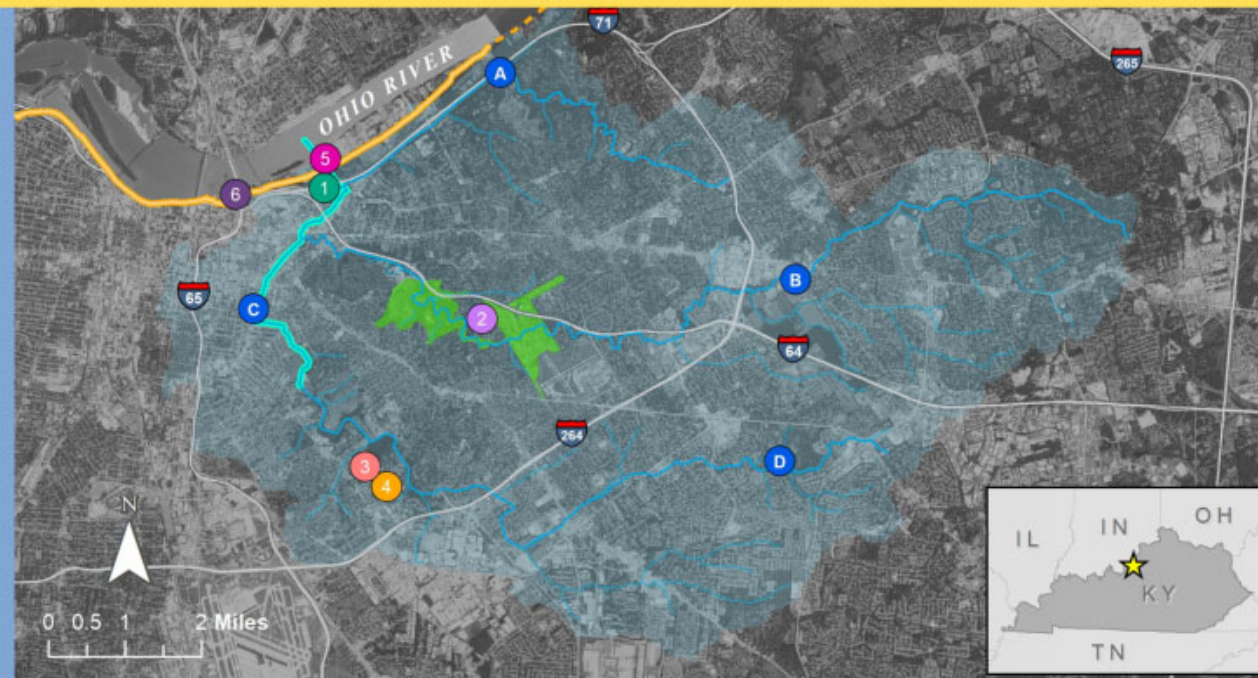


Three Forks of Beargrass Creek Ecosystem Restoration Feasibility Study



Recommended Plan Impacts: → 620 acres total restored → 8.8 miles of instream restoration → Unit cost: \$14,500/AHU

Project Area Highlights



- 1 Louisville Botanical Gardens
- 2 Cherokee/Seneca Parks
- 3 Louisville Nature Center
- 4 Louisville Zoo
- 5 Confluence with Ohio River
- 6 Waterfront Park
- Louisville Loop
- Future Louisville Loop
- Concrete Channel
- Interstate
- Stream/River
- Beargrass Creek Watershed



Property Acquisition by Owner (>20 acres)

Owner	Site(s)	Acres	% of Plan by Acreage
Louisville Metro Parks	X34	153.3	23.9%
Louisville Metro Government	X2, X10, X30, X38	97.6	15.2%
Board of Park Community	X34	50.7	7.9%
Roman Catholic Bishop of Louisville*	X29	48.8	7.6%
City of St. Matthews	X20, X21	45.4	7.1%
KY Nature Preserves	X30	40.0	6.2%
1860 Mellwood LLC	X2	25.7	4.0%
Louisville MSD	X2, X19, X29, X33, X35, X38	25.5	4.0%
Commonwealth of KY	X10, X34, X38	23.5	3.7%
Norton Hospitals	X29	20.5	3.2%
TOTAL		531.0	82.8%

*Includes Sacred Heart & Saint Xavier High School

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Financial Impact to Capital Improvement Program (Optimized Plan)

Total Cost = \$121,135,000

65% Federal
=
\$78,737,750

35% Non-Federal = \$42,397,250

LERRDs = \$48,700,198

(Land, Easements, Rights of Way, Relocations, and Disposal)

5% Cash =
\$6,056,750

Remainder =
(\$12,359,698)

Lands &
Damages =
\$31,679,681

Relocations =
\$17,020,517

WIK

FY check(s)

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Path Forward

- Meet with Potential Non-Federal Sponsors.
- Explore Potential for Fund Raising
 - Philanthropy
 - Corporate Sponsors w/ ESG Goals
- Other Funding Opportunities
 - Grants
 - Infrastructure Spending

MSD does not have the capital to fund the local match. Partnerships and funding are needed to advance the project.



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