

Paddy's Run Flood Pump Station Capacity Upgrade

Metro Sewer District (MSD)



April 11, 2023

Agenda

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Next Steps









Welcome and Introductions

Introductions





Johnathan Thomas Project Manager, HDR Ameerah Palacios Strategic Communications Lead, HDR





Flood Protection System

An essential part of keeping homes and businesses safe.

- MSD has been responsible for Louisville's flood protection system since 1987.
- When the river rises, the levee and floodwall protect the city from flooding, while the pump stations pump water from the city into the river.
- The system includes 16 flood pumping stations, 26.1 miles of floodwall and earthen levee, 150 floodgates, and 79 roadway closures.
- Age and severe storms can strain the system.









Paddy's Run Flood Pump Station has served the community since 1953.



Paddy's Run Flood Pump Station

History

- Built in 1953
- Protects 214,500 people, 70,000 homes, 60 businesses and 40 neighborhoods.

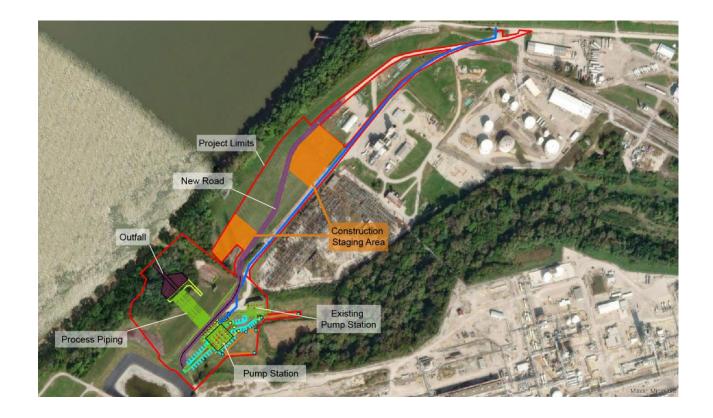
Replacement

- Paddy's Run pump station is currently at high-risk of failure, due to age.
- It has operated with original parts since 1953 parts that are no longer available for replacement.
- The project seeks to replace the pump station to meet a projected 10-year, 24-hour storm event, by doubling its capacity to 1.9 billion gallons per day.





Location







Project Need and Purpose

Project Need and Purpose

Purpose

- Replace the pump station to meet a projected 10-year, 24-hour storm event, by doubling its capacity to 1.9 billion gallons per day.
- Increase capacity to protect more than 63,000 residents.

Need

- The Paddy's Run Flood Pump Station is nearly 70 years old.
- Doubling the capacity will improve the community's protection from Ohio River flooding and will improve its resiliency during storms, by reducing the risk of failure.
- Replacement will reduce combined sewer overflows (CSOs) from flooding.







Project Design and Schedule

Project Design

Process

The project will follow a two-stage process. Completion is expected by 2027.

- Stage 1 will include:
 - Project planning
 - Site assessment
 - A series of design submittal plans, in stages, before construction
- Stage 2 will include construction activities, such as:
 - Procurements and sitework
 - Diaphragm wall work, concrete and HVAC

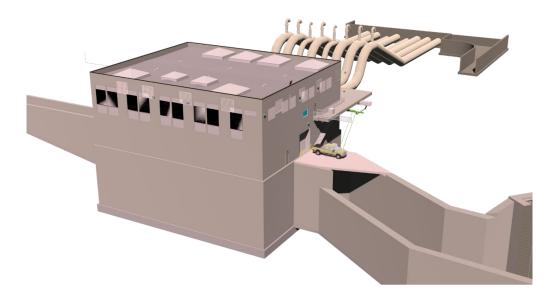


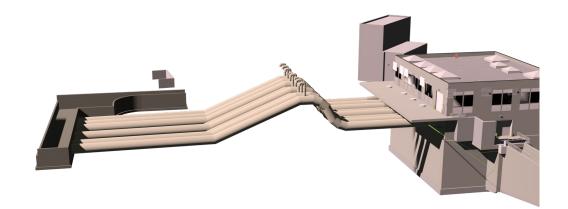


Project Design

Parameters

- Replace existing flood pump station
- Pumps from dry side of levee to river side of levee
- Decrease current hydraulic grades upstream
- Design flow of 1,900 MGD
- Each of the six large pumps can fill 10 residential pools per minute







Project Schedule

Task	2021	2022	2023	2024	2025	2026	2027
USACE Review and Approve Early Start Work Phase							
Provide Support for MSD Funding Applications							
Develop Communication and Stakeholder Outreach Plan							
Meetings with MSD Communication Staff, As Needed							
Bi-Weekly Design Workshops							
Conduct Field Surveys							
Develop 60% Design Plans							
Update BODR and Document Design Changes							
Develop Construction Execution Plan							
Prepare Legal Descriptions and Plats							
Present/Submit Draft 60% Design Documents to MSD							
60% Design Collaborative Workshop							
Finalize 60% Design Documents							
Submit 60% Set (Phase 2) to USACE							
USACE Review and Approve 60% Set (Phase 2)							
Develop 90% Design Plans							
Submit Draft 90% Design Documents to MSD							
MSD Review 90% Design Documents							
Collaborative 90% Design Review Meeting							
Finalize 90% Design Documents							
Develop 100% Design Plans							
GMP Proposals							
Commissioning Paddy's Run Flood Pump Station							
Substantial Completion							
Final Completion							





Budget and Funding

Budget and Funding

Estimated Cost

• The estimated cost of the project is around \$220M.

Funding

The Clean Water Act:

- Bipartisan Infrastructure Law (BIL) funding has provided for a significant investment in Clean Water infrastructure through State Revolving Fund programs.
- The Paddy's Run project is funded through the Clean Water Act and Kentucky Cleaner Water Grants. The Clean Water Act is overseen by the Environmental Protection Agency (EPA) and is also governed by the Kentucky Division of Water.







Potential Project Impacts

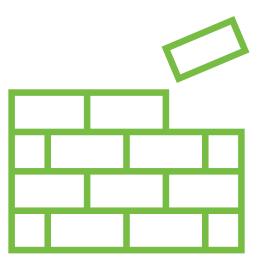
Potential Project Impacts

Impacts to the Public

- The project will have minimal negative impacts to the public.
- Any impacts on the environment are short-term and during construction.

Improvements

• Improvements from the project include positive infrastructure changes.







Public Comment

- You may submit a comment through one of our comment forms at today's meeting or by contacting MSD's customer service department.
- You may also visit MSD's project page to learn more. <u>https://louisvillemsd.org/upgrade-ohio-river-flood-protection</u>
- Customer Service Department:
 - Phone: 502-540-6000
 - Email: <u>CustomerRelations@LouisvilleMSD.org</u>







Public Comment

- The public comment period will take place between April 11 April 29, 2023.
- Comments will be collected during this time.
- Any comments received afterward will be kept but may not be reflected in the finalized public meeting record.







Previous Outreach Efforts

MBE/WBE Project Goals – Overall Supplier Diversity Goals for Construction

• 20% MBE

- o 18% African Americans
- o 2% Asian Indian Americans
- 15% WBE
 - o 15% Caucasian Females
- Bid Package Targets Optimized for Supplier Diversity
- 76% Local Labor Commitment
 - Kentucky and Indiana









Questions and Discussion

Questions and Discussion







Next Steps

Next Steps

Upcoming Milestones

- Construction between April 2023 May 2027
- 90% Design Plan May 2023
- 100% Design Plan June 2023

Other Important Dates and Information

- Commissioning Paddy's Run flood pump station mid-2026
- Project completion mid-2027

