



# **SEWER STUDY UPDATE**

## **FEBRUARY 2025**

# AGENDA



- Sewer Infrastructure Overview
- History of Bexley Sewer Studies
- 10-Year Sewer Improvement Project Look-Back
- Funding Sewer Projects
- Purpose of 2025/2026 Study
- 2024 RFP Process for Sewer Engineering Firm
- 2025 Budget Impact
- Future Capital Planning and Budget Impact

# SEWER INFRASTRUCTURE



SANITARY  
**254,000**  
LINEAR FEET

SANITARY  
**737**  
MANHOLES

STORM  
**222,000**  
LINEAR FEET

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## MANAGEMENT INCLUDES:

- Sewer line spot repair and replacement
- Sewer lining
- Inspection and repair of manholes and catch basins
- Inspection and repair of stormwater inlets
- Post-project flow monitoring

# SEWER STUDIES: HISTORY



- **2002: City of Columbus ordered to eliminate improper discharge from collection system and wastewater treatment plants**
- **2009: Ohio EPA issues Director's Final Findings and Orders (DFFO); Required satellite Columbus communities to:**
  - Ensure the sewer system can handle base and peak flows (e.g. during high rainfall);
  - Reduce impact of sanitary sewer overflows (SSOs) and water in basements (WIBs);
  - Cut down on extra water entering the sewer system (inflow and infiltration - or I/I);
  - Notify people who might be affected if an overflow happens.
  - To comply with these requirements, Bexley was required to conduct a Sewer System Evaluation Study (SSES) to identify where and how extra water is getting into the system (I/I), and propose cost-effective ways to fix the problem and prevent future overflows or basement flooding.



# SEWER STUDIES: HISTORY



- **2004: Sanitary Sewer Evaluation**
- **2007 Gould Road Flow Monitiroing**
- **2009: Bexley Begins SSES - 5-Year Study**
  - City engaged with EMH&T in 2009
    - Scheduled a 5-Year SSES study
      - 2009-2010: Program Set Up
      - 2010-2011: Flow Monitoring
      - 2011-2012: Gould Road SSES and Clifton Road SSES
      - 2012-2013: Livingston Avenue SSES
      - 2013-2014: Alum Creek SSES and Final Report

# SEWER STUDIES: COUNCIL ACTION



- 2009-2014: SSES 5-Year Study w/EMH&T
- 2013: City Council adopted a Water and Sewer Capital Fee for the first time as SSES was concluding (Ord 23-13)
- 2014:
  - Council reviewed and approved a 26-Year Funding Plan
  - DFFO Summary Report Submitted to Ohio EPA

# SEWER IMPROVEMENTS



PROJECT/ YEAR	2015-2018	2019	2020-2035	2036-2037	2038-2040
DFFO IMPLEMENTATION SCHEDULE	\$ 1,670,105	\$ 125,000	\$6,596,945	\$3,026,940	\$ 1,570,830
2015 SEWER IMPROVEMENTS	\$ 197,210				
2017 SEWER IMPROVEMENTS	\$ 177,474				
2018 ASHBOURNE SEWER IMPROVEMENTS	\$ 328,266				
2018 ST CHARLES SEWER LINING	\$49,500				
2018 SOUTH ROOSEVELT SEWER IMPROVEMENTS	\$288,208				
2018 STANWOOD STORM IMPROVEMENTS	\$ 189,272				
2019/20/21 SEWER IMPROVEMENTS			\$303,498		
2021/22 SEWER IMPROVEMENTS			\$196,897		
2021/22 S DREXEL SEWER LINING			\$477,308		
2022 S DREXEL STORM IMPROVEMENTS			\$604,961		
2021 VERNON ROAD IMPROVEMENTS			\$103,332		
2021/22/23 SEWER IMPROVEMENTS			\$ 668,347		
2022/23 CHELSEA AREA SEWER LINING			\$269,655		
2023 CHELSEA SANITARY SEWER			\$325,486		
ACTUAL PROJECT TOTALS	\$1,229,930		\$2,949,484		

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DFFO ANNUAL AVERAGE: \$439,000  
ACTUAL ANNUAL AVERAGE: \$737,371



# NEED FOR FUTURE STUDY



- Concerns with 2014 SSES information:
  - Sub-basin specific suggestions questioned
    - Actual WIB reports differ from SSES suggestions
  - Lack of information for certain sub-basins
  - On-going and post-project flow monitoring differ from study results
  - Relief sewer recommendation not viable
- Changing theories/methods of how to reduce private I/I
- Lack of a storm sewer atlas/modeling
- Lack of comprehensive analysis since 2014
- Decreasing balance in Sewer Fund

# SEWER EXPENSES



	2022 ACTUAL	2023 ACTUAL	2024 BUDGET	2024 PROJECTED	2025 PROPOSED
SEWER ADMINISTRATION (SELECT CONTRACT EXPENSE)					
CITY OF COLUMBUS CONTRACT	\$ 1,672,873	\$ 1,801,883	\$ 1,942,500	\$ 1,942,500	\$ 2,059,050
SEWER SERVICE (SELECT CAPITAL EXPENSES)					
MANHOLE COVERS	\$ 5,498	\$ 9,748	\$ 15,000	\$ 11,000	\$ 15,000
SEWER IMPROVEMENTS	\$ 97,740	\$ 252,488	\$ 480,000	\$ 480,000	\$ 100,000
SEWER REMEDIATION PROGRAM	\$ 23,700	\$ 72,969	\$ 100,000	\$ 35,000	\$ 50,000
SEWER STUDIES AND INSPECTIONS	\$ 150,000	\$ 10,788	\$ 50,000	\$ -	\$ 550,000

# SEWER EXPENSES



62%  
OPWC



38%  
CITY (SEWER FUND)

# STATUS QUO: SEWER FUND



	2022 ACTUAL	2023 ACTUAL	2024 BUDGET	2024 PROJECTED	2025 BUDGET
TOTAL REVENUE	\$ 2,742,995	\$ 2,739,131	\$ 2,875,498	\$ 3,017,067	\$ 3,090,000
TOTAL EXPENDITURES	\$ 2,355,222	\$ 2,503,298	\$ 2,718,465	\$ 3,222,614	\$ 3,341,714
REVENUES OVER (UNDER) EXPENDITURES	\$387,772.87	\$235,833.04	\$157,032.74	(\$205,546)	(\$251,713)
SEWER FUND DEBT SERVICE	\$ 77,911	\$77,964	\$84,922	\$84,921	\$101,369
SEWER FUND BALANCE	\$ 3,784,221	\$ 3,486,406	\$ 3,122,608	\$ 2,264,892	\$ 1,911,809



# 2024 RFP PROCESS



- Formed internal sewer study committee (Mayor, Director of Public Service, Water and Sewer Supervisor, City Engineer, Director of Administration and Development)
- Issued RFP in May for comprehensive analysis
  - Three responses:
    - Burgess & Niple, Inc. - B&N (preferred)
    - EP Ferris and Associates
    - Arcadis
- Proposal Evaluation follow up included:
  - Reference checks
  - Individual interviews
  - Standardized response form
  - Scope reduction (for B&N)

# FUTURE IMPLICATIONS



- ~\$500k - Phase II Study in 2026
- New 10-Year Capital Improvement Program
  - Likely multi-million dollar investment annually
- Funding evaluation for 10-Year CIP
  - End user capital fees
  - Bonds
  - OPWC
  - Other