



PUBLIC WORKS BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS BALTIMORE



DPW

DEPARTMENT OF PUBLIC WORKS BALTIMORE CITY DEPARTMENT OF PUBLIC



Modified Consent Decree

Public Information Session

January 23, 2018

MDE Building
1800 Washington Blvd, First Floor Lobby



Catherine E. Pugh
Mayor

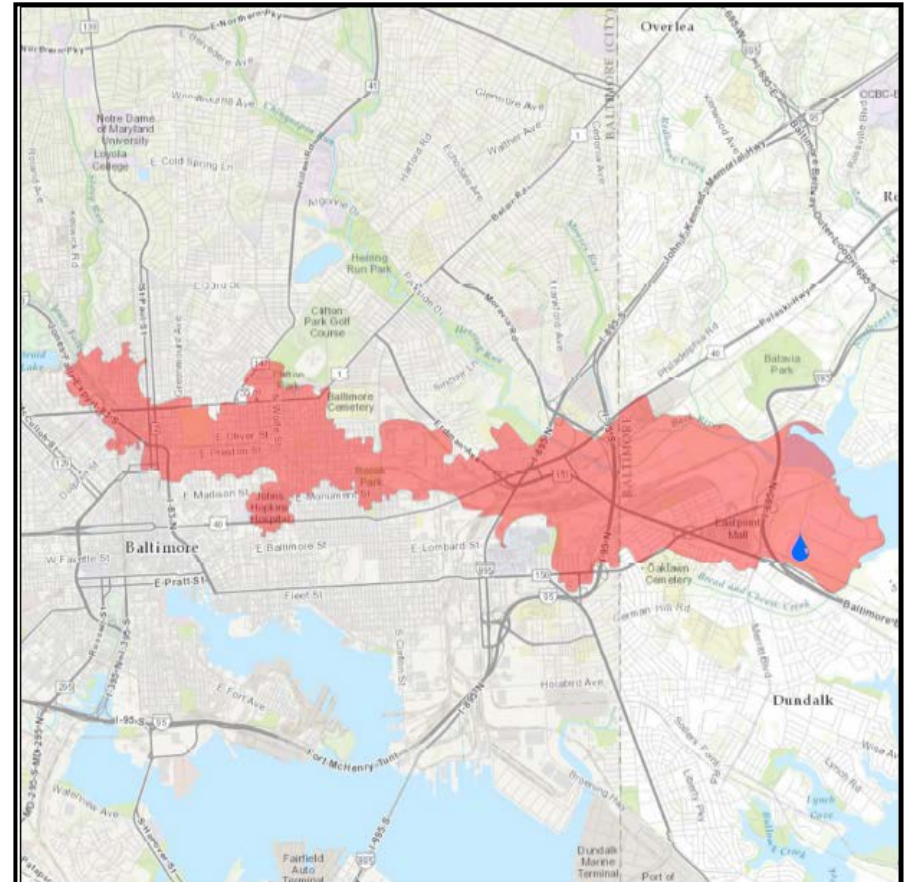
Baltimore City Department of Public Works



2002 Consent Decree

Baltimore City entered into a Consent Decree (CD) with EPA, DOJ, and MDE on September 30, 2002.

- The CD addresses sanitary sewer overflows (SSOs) from the City's collection system.
- The City was not able to comply with the initial CD deadline, in part, because of a hydraulic restriction discovered at Back River Wastewater Treatment Plant (WWTP)



Modified Consent Decree

The City of Baltimore went back to the drawing board with EPA and MDE to draft a modified agreement. Through negotiations a new and more robust strategy was agreed upon.

- Deadlines are extended for CD compliance because:
 1. The City is doing more
 2. It allows the City to work smart, completing projects for less money
- The MCD was entered by the U.S. District Court on October 6, 2017,
 - **Phase I deadline – January 1, 2021**
Rehabilitation of collection system and elimination of SSOs
 - **Phase II deadline – December 31, 2030**
Reducing infiltration/inflow and upgrading hydraulic capacity of the collection system citywide



Paragraph 8 – Elimination of SSO Structures

The City of Baltimore shall eliminate the identified Sanitary Sewer Overflow Structures and comply at all times with the Clean Water Act.

- 60 out of the 62 original SSO structures identified have been eliminated.
- Over the past 12 months, the City has discovered additional SSO Structures
- Currently, 15 SSO structures are being monitored. Baltimore has created action plans and these structures are on track to being eliminated per the requirements of the MCD



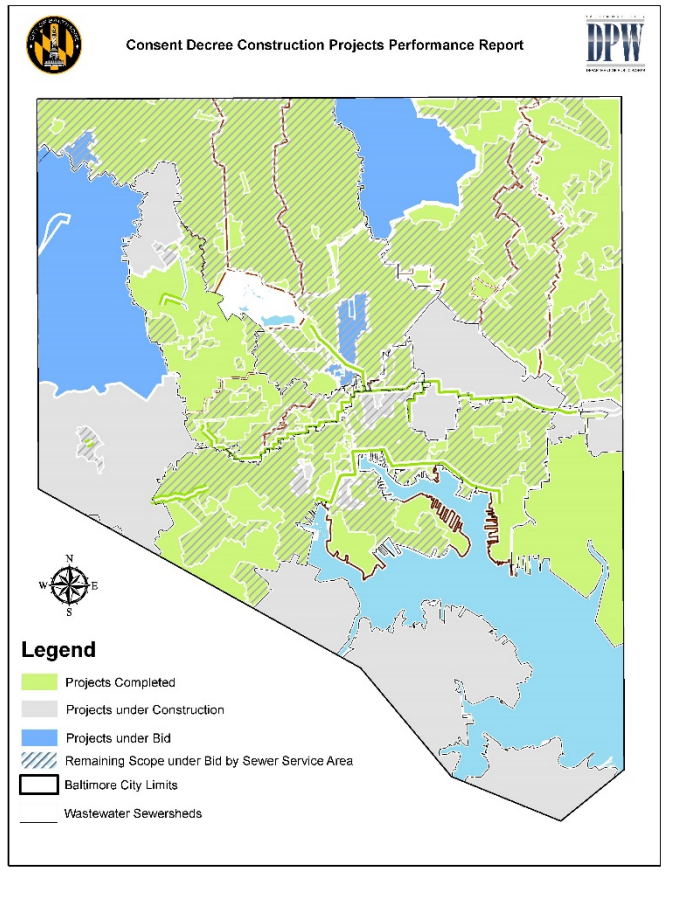
Paragraph 9 – Implementation of Sewershed Plans

The City of Baltimore shall complete all projects specified in Phase I and Phase II Plans by implementing an adaptive management process.

- **Activity to date:**
 - 20 CD construction projects completed
 - 11 CD projects in final phase of design
 - 6 active CD construction projects
- **Types of Projects:**
 - Cured-in-place pipe (CIPP)
 - Point repair
 - Manhole rehabilitation
 - Sanitary House Connection/rehabilitation or reinstatement
- **Back River WWTP Headworks Project**
 - New Influent Pumping Station
 - New screening and grit removal facilities



Over the Past 12 Months...



Over the past 12 months...

- 5 Design projects completed
- 1 Construction project started
- 3 Construction projects completed



Paragraph 9 – Regulatory Studies and Deliverables

- Rainfall and flow monitoring
- Quarterly Progress Reporting

Over the past 12 months...

- Installed 16 additional rainfall and flow monitors
- Submitted progress reporting to EPA and MDE for each calendar quarter

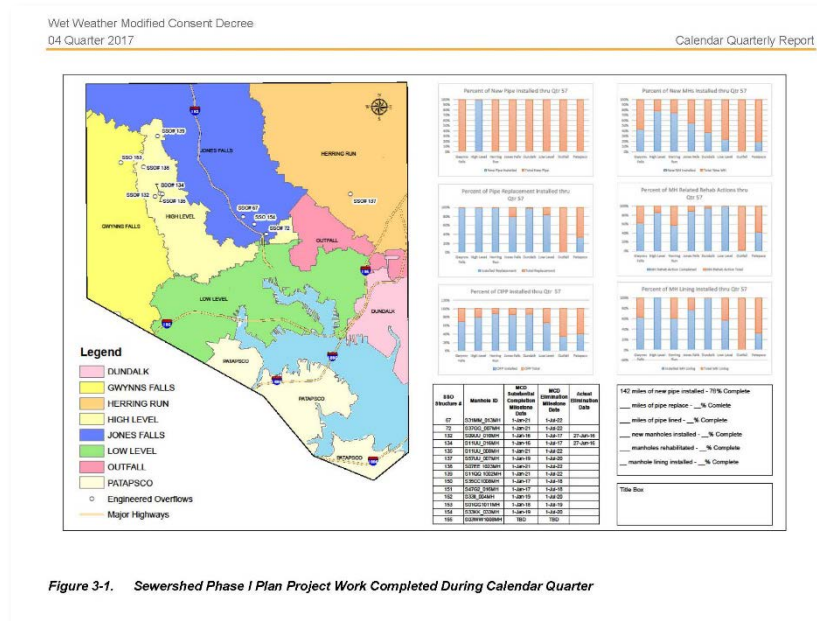


Figure 3-1. Sewershed Phase I Plan Project Work Completed During Calendar Quarter



Back River WWTP Headworks Project

- The Headworks Project, totaling approximately \$430 Million, helps fulfill Baltimore City's Consent Decree requirements to address sewage overflows.
- Contributing to more than 80% reduction in SSOs



Paragraph 10 – Illegal Sewer Connections

The City of Baltimore shall continue to identify and eliminate each illegal connection to the Collection System.

- Baltimore continues to implement its illegal private connections enforcement action plan
- Illegal connections are identified in the Quarterly Progress Reports
- Baltimore will notify owners of privately-owned portions of laterals that cause or contribute to overflow of the collection system

Over the past 12 months...

- One enforcement action was implemented and the illegal connection abated



Paragraph 11 – Pumping Station Inspection, Repair, and Rehabilitation

The City of Baltimore shall continue to perform the following activities,

- Daily pumping station inspections
- Pumping station remote monitoring and SCADA system maintenance
- Pumping station preventative maintenance program
- Pumping station updates provided in Quarterly Progress Reports

Over the past 12 months...

Type of Maintenance	Work Orders Completed	Percent of Total Work Orders
Preventive	2,880	90%
Corrective	305	10%
TOTAL	3,185	

No near-miss incidents or overflows



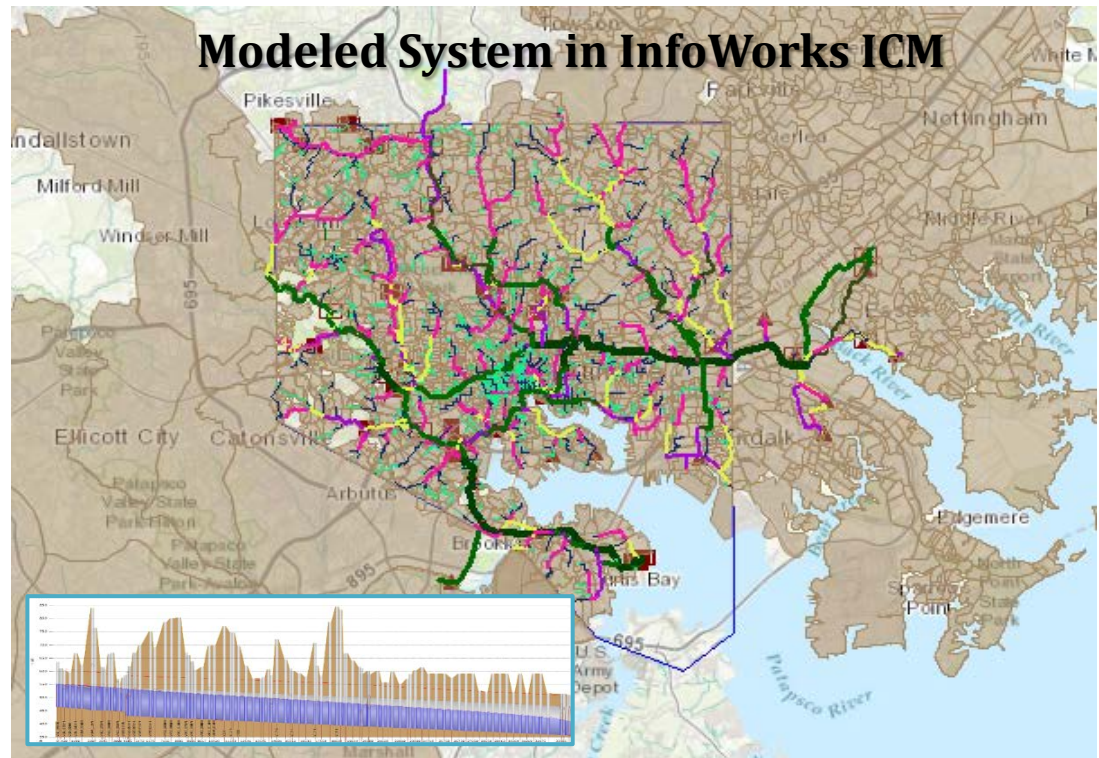
Paragraph 12 – Collection and Transmission System Model

The City of Baltimore shall maintain the computerized collection and transmission system model for the Collection System

- The model establishes baseline performance and informs of overall system impact of potential projects

Over the past 12 months...

- Hydraulic modeling analyses to support Phase I projects
- Re-structured the City's hydraulic model database



Paragraph 13 – Collection System Operation and Maintenance

The City of Baltimore shall perform a comprehensive review of its operation and maintenance (“O&M”) Plan and prepare a revised O&M Plan for the Collection System, detailing how Baltimore will evaluate and maintain an effective program to prevent and minimize dry weather overflows.

- Annual O&M Progress Report to be submitted to EPA and MDE by October 2018

Revised O&M Plan
Public: Now
MDE/EPA: 2/2/18



Over the Past 12 Months...

Activity	Results
Develop revised O&M Plan and publish to DPW website for public comment	Plan published 12/20/17
Develop Targeted Cleaning program to inspect and clean collection system sewers	12 miles cleaned
Conduct Fats, Oils, and Grease (FOG) treatment of sewer lines	8 miles treated
Treat sewer lines for root intrusion	92 miles treated
Conduct Food Service Establishments (FSE) inspections	3,997 inspections



Paragraph 14 – Information Management System Program

The City of Baltimore shall maintain its information management system for the collection system including,

- GIS database
- Inventory of collection system assets
- Updates to inventory based on rehabilitation
- Baltimore uses the Cityworks application for customer service requests and work order management

Over the past 12 months...

- Full utilization of the mobile SSO reporting application
- Achieved in-house management and expanded use of Cityworks



Paragraph 15 – Addressing Sanitary Discharges of Unknown Origin (SDUO)

The City of Baltimore shall develop and implement a plan for the investigation and the elimination of SDUOs.

- An SDUO is a discharge of sewage through Baltimore’s separate **storm** sewer system, where the source of the sewage is **unknown**

Over the past 12 months...

- 12 SDUOs discovered, 8 abated
- 17 from previous year abated
- Reduced average abatement to 67 days

SDUO Plan
Public: Now
MDE/EPA: 2/2/18



Paragraph 16 – Revised Emergency Response Plan

The City of Baltimore shall revise and submit to EPA and MDE its Emergency Response Plan (ERP) to adequately protect the health and welfare of persons in the event of an unpermitted release, spill or discharge of pollutants from the Collection System or in the event of a reported Building Backup.

- ERP training conducted annually for DPW operations, maintenance and response staff

New ERP inclusions:

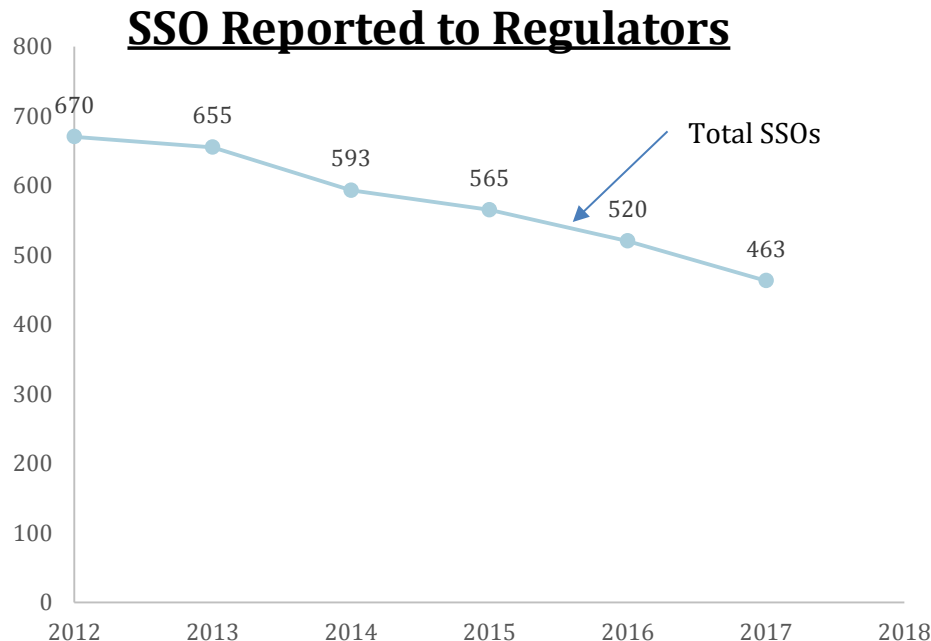
- Building Backups
- SDUOs

Revised ERP
Public: 2/16/18
MDE/EPA: 4/4/18



Paragraph 17 – Reporting of Overflows and Recordkeeping

Baltimore continues to see overall reductions in SSOs due to various collection system improvements, repairs, and continued implementation of preventive maintenance programs



Programs to reduce SSOs

- Sewer Target Cleaning
- FOG Abatement
- Root Control
- SSO Root cause analysis
- Collection system repairs/upgrades



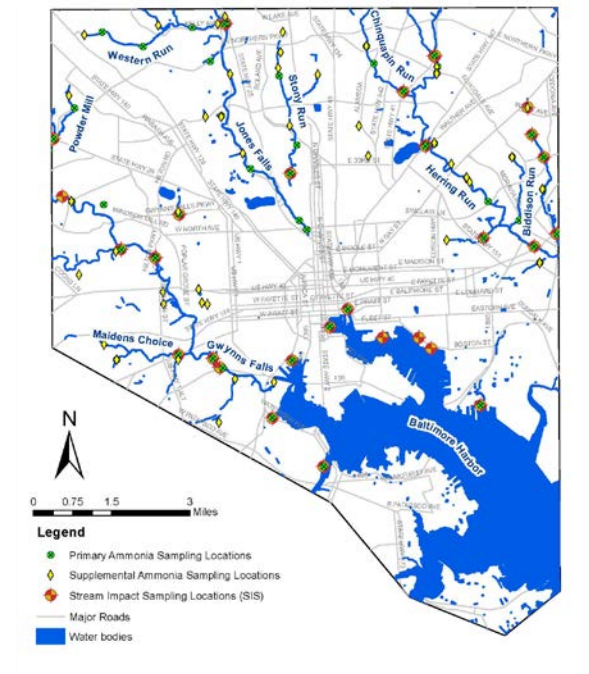
Paragraph 19 – Stream Quality Monitoring

Baltimore shall post on the DPW website the results of its water quality monitoring programs.

- Baltimore continues to take action to monitor stream quality including,
 - Ammonia Screening (AS), weekly
 - Stream Impact Sampling (SIS), monthly

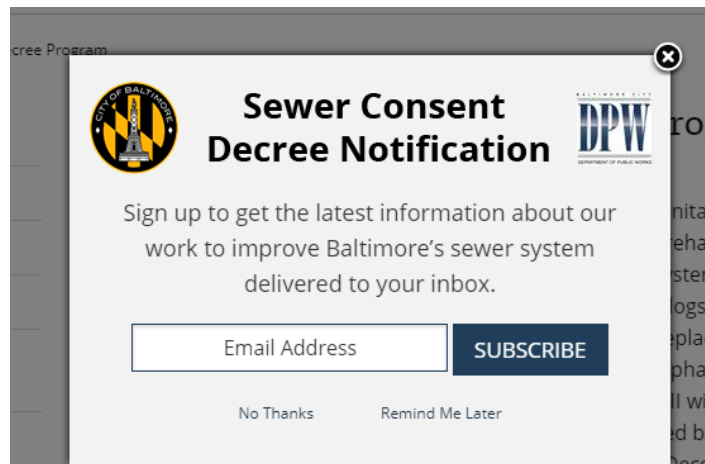
Over the past 12 months...

- Updated protocol for web posting
- Sampling completed at:
 - Over 80 AS locations
 - Over 30 SIS locations



Paragraph 20 – Review and Approval of Deliverables

Activity	Results
Update Modified Consent Decree landing page on DPW website	Updates launched 11/3/2017
Post instructions on DPW website for public to receive updates	



Learn more about the Consent Decree

[Reports](#) | [FAQ's](#) | [Glossary](#) | [Upcoming Projects & Public Meetings](#)

Publication	Public Comment Posting Date	Links to Comment Form	Comments Accepted Until	Final Version submitted to the Regulators
SDUO Plan	December 20, 2017	SDUO Plan Comments	January 20, 2018	
O&M Plan	December 20, 2017	O&M Plan Comments	January 20, 2018	

<https://publicworks.baltimorecity.gov/sewer-consent-decree>



Small Business Development Program

The Small Business Development Program positions Minority/Women/Disadvantaged Business Enterprises (M/W/DBE) to successfully compete for \$3 Billion in utility construction work, including Consent Decree sewer rehabilitation.

- Enrollment has tripled from 2016
- Learning includes best practices, OSHA certification and networking
- 10-week program facilitated by City and Consent Decree prime contractors and consultants
- New class forming in Sept 2018



21



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Mayor

Baltimore City Department of Public Works



Modified Consent Decree

- The City is doing more to prevent SSOs
- The City is thoroughly evaluating the collection system
- The City is working smart, completing projects in a way that is economical for the people of Baltimore
- The City is investing in local small businesses



Questions?

Proceed to Information Learning Stations

- **Learning Station 1 – Collection System and tools (Paragraphs 8, 9, and 12)**
 - SSO Structures
 - Rainfall and flow monitoring
 - Collection System rehabilitation projects
 - Hydraulic modeling
- **Learning Station 2 – Communications/Local Economic Development (Paragraph 20)**
 - Navigating DPW website
 - Small Business Development Program
- **Learning Station 3 - Maintenance & Preventive Maintenance (Paragraph 13, 14, and 17)**
 - O&M Plan
 - Preventive Maintenance Programs
 - Cleaning program
 - Fats, Oils, and Grease (FOG)
 - Root Control
- **Learning Station 4 – Compliance (Paragraph 10, 15, and 19)**
 - Sanitary Discharges of Unknown Origin
 - Water quality monitoring
 - Illegal sewer connections
- **Learning Station 5 – Facilities (Paragraph 9 and 11)**
 - Back River Headworks Project
 - Wastewater pumping stations
- **Learning Station 6 – Regulatory Requirements (Paragraph 9 and 16)**
 - Building backups/SSOs
 - HomeServe
 - Emergency Response Plan
 - Expedited Reimbursement Program

