

City of Baltimore
Department of Public Works

**Modified Consent Decree Program
Revised Operation & Maintenance Plan**

Sanitary Sewer Overflow Consent Decree
Civil Action No. JFM-02-1524

November 2023



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Acronyms and Abbreviations

BMP	best management practice
CMMS	Computerized Maintenance Management System
City or Baltimore City	Mayor and City Council of Baltimore
CCTV	closed circuit television
CCA	Baltimore City Department of Public Works – Office of Communications and Community Affairs
CIPP	cured-in-place-pipe
CNA	cannot access
CNL	cannot locate
CNO	cannot open
CSR	Customer Service Request
DPW	Baltimore City Department of Public Works
FOG	fats, oils, and grease
FSE	food service establishment
GIS	Geographic Information System
GCD	grease control device
DHCD	Baltimore City Department of Housing and Community Development
I/I	infiltration and inflow
MCD	Modified Consent Decree
NOV	Notice of Violation
OAM	Baltimore City Department of Public Works – Office of Asset Management
O&M	operation and maintenance
PCS	Baltimore City Department of Public Works – Pollution Control Section
QA/QC	quality assurance/quality control
SR	service request
SSO	sanitary sewer overflow
SSES	sewer system evaluation survey
UMD	Baltimore City Department of Public Works – Utility Maintenance Division
WIC	water-in-cellar

2.2.2.2 Assigning Pipe System Cleaning Frequency.

An inspection/cleaning schedule will be prepared that assigns an inspection/cleaning frequency to the targeted areas with a cycle frequency between 2 and 4 years. The highest risk targeted areas will be assigned during the first year of the MCD and will be updated each subsequent year to ensure the highest risk targeted areas are inspected/cleaned first. In order to maximize efficiency and reduce costs, efforts will be made to level out the workload for each year and to assign targeted areas within each sewer basin to be inspected/cleaned at the same time when feasible.

2.2.2.3 Modifying the Cleaning Frequency of the Targeted Area Inventory

Each year, the risk scores will be re-calculated based on a rolling 3-year total of main line blockages that have occurred in each targeted area. The new risk score will then be compared to the prior year risk score and the results will trigger the following actions:

- If the new risk score for the targeted area remains within the cycle frequency range that was previously assigned, the scheduled year for inspection/cleaning will remain unchanged.
- If the new risk score for the targeted area is either greater or less than the inspection/cleaning frequency range currently assigned, the new schedule will be revised to reflect the changes in the inspection/cleaning cycle frequency.

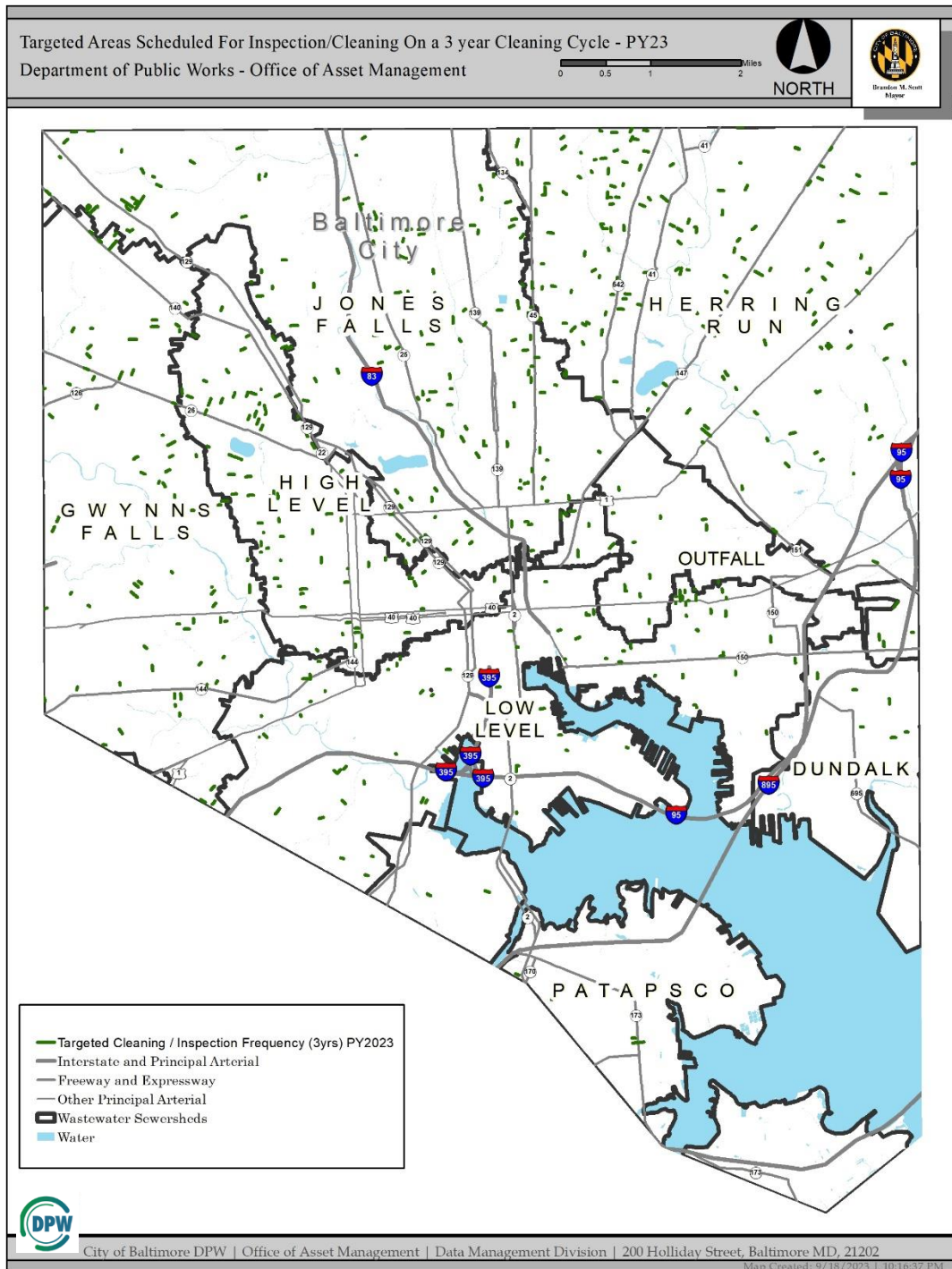
The inspection/cleaning cycle frequency for targeted areas will be assigned between 2 and 4 years based on the risk score for each targeted area.

Appendix A:

Targeted Areas for 3-Year Inspection/Cleaning Cycles

The City of Baltimore is simplifying its Target Cleaning Program to improve the efficiency of the management and execution of the Program. The following process will be implemented moving forward:

- i. Only mainline pipes experiencing reoccurring blockages or dry weather SSOs within the previous three fiscal years should be included.
- ii. A single inspection frequency of three years should be assigned to the candidate pipes.
- iii. Pipes on the Targeted Program should not be cleaned prior to CCTV so that the true operational condition of the pipe can be assessed.
- iv. Based on CCTV and other available data, root cause analysis on each pipe should be performed and the candidate pipes be placed in the appropriate maintenance program such as Root Control, FOG Control, Cyclical Cleaning etc. or recommended for capital improvement (CIP) if required.
- v. Pipes may be removed from the Targeted Program once they are placed in the appropriate maintenance program.



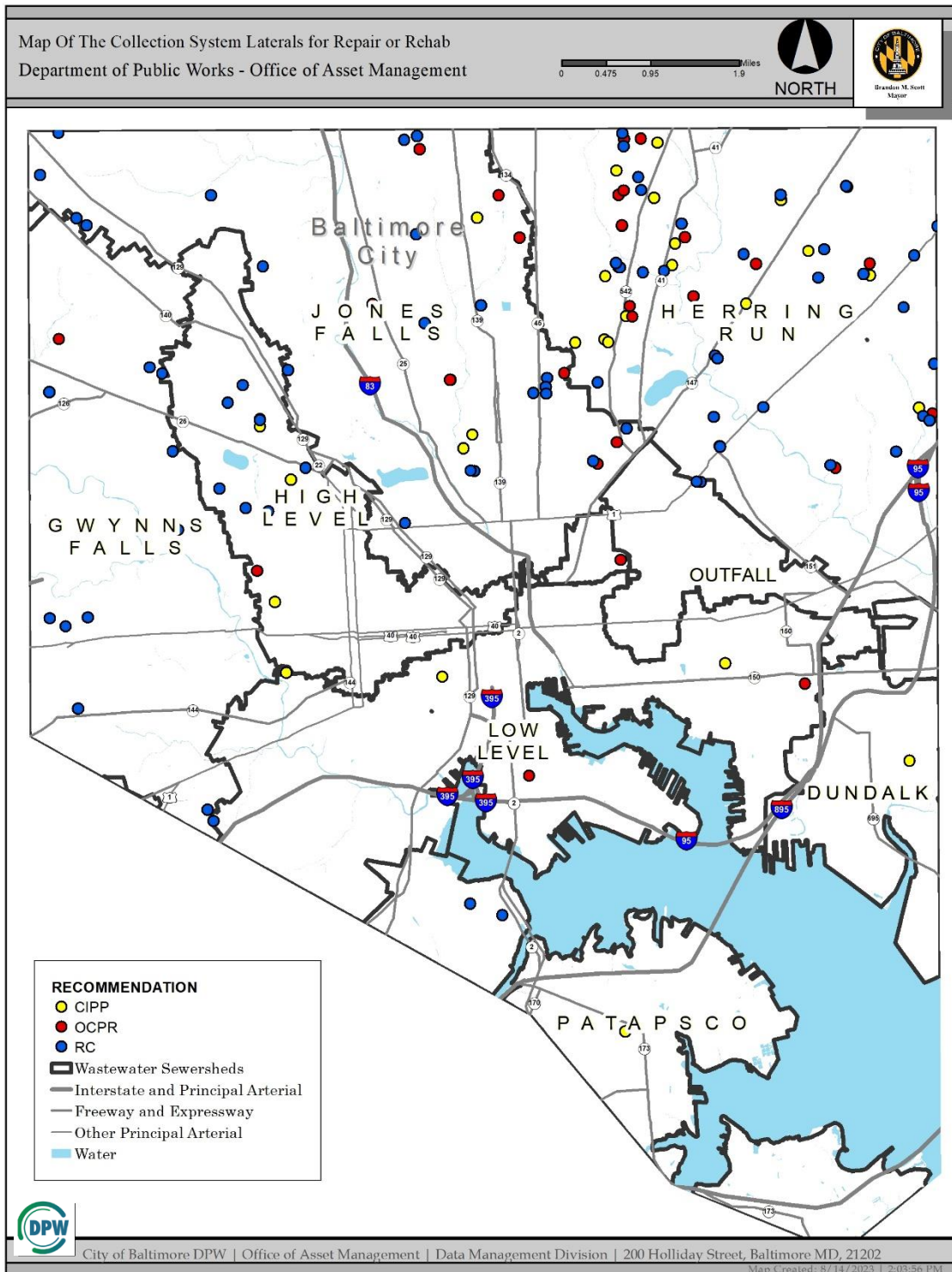
Note: Targeted Cleaning assets were identified from fiscal year 2021 to fiscal year 2023

Figure A-1: Targeted Areas Scheduled for Inspection/Cleaning on a 3-year Cleaning Cycle

Table A-1: List of Targeted Areas Scheduled for Inspection/Cleaning on a 3-year Cycle

Table A-1				
Basin	Basin Chokes	No. of Dry SSOs	Volume of Dry SSOs GAL	3-Year Cleaning Cycle
	3-year History			
Dundalk	35	9	4,983	1,497
Gwynn's Falls	244	98	698,689	18,296
Herring Run	437	112	714,116	38,538
High Level	280	107	13,084	19,095
Jones Falls	453	179	169,732	36,184
Low Level	312	98	2,221,312	13,883
Outfall	74	33	2,195	4,445
Patapsco	61	15	2,400	2,204
Total	1,896	651	3,826,511	134,141

Appendix B:
Collection System Laterals for Repair or Replacement



Note: Building Backups were evaluated from fiscal year 2021 to fiscal year 2023 using data collected through customer service requests and work orders for lateral-based WICs.

Figure B-1: Collection System Laterals for Repair or Replacement

Recurring Building Backups were identified *from fiscal year 2021 to fiscal year 2023* using data collected through customer service requests and work orders for lateral-based WICs. Laterals are prioritized based on the number of Building Backup occurrences *during a rolling 3-year timeframe*.

Table B-1: List of Collection System Laterals for Repair or Replacement

Address	Building Backups	Recommendation
Cure in Place Pipe (CIPP)		
6502 BROWN AVE	17	CIPP
1210 ARGONNE DR	14	CIPP
1320 STONEWOOD RD	13	CIPP
926 ARGONNE DR	12	CIPP
3139 NORTHWAY DR	11	CIPP
3620 WABASH AVE	11	CIPP
420 EAST 30TH ST	11	CIPP
1814 INGRAM RD	9	CIPP
6101 FAIRWOOD AVE	9	CIPP
6605 HILLTOP AVE	8	CIPP
1449 GITTINGS AVE	7	CIPP
1314 PONTIAC AVE	6	CIPP
1502 LOCHWOOD RD	6	CIPP
273 SOUTH ROBINSON ST	6	CIPP
4009 ROUNDTOP RD	6	CIPP
4800 HARFORD RD	6	CIPP
3217 WHITE AVE	5	CIPP
1503 NORTH POTOMAC ST	4	CIPP
1812 NORTHBOURNE RD	4	CIPP
2810 GOODWOOD RD	4	CIPP
825 WEST LOMBARD ST	4	CIPP
1524 RAMBLEWOOD RD	3	CIPP
2720 KINSEY AVE	3	CIPP
2817 HEMLOCK AVE	3	CIPP
3120 TIOGA PKWY	3	CIPP
5267 CEDONIA AVE	3	CIPP
5927 THE ALAMEDA	3	CIPP
114 UPNOR RD	2	CIPP
261 WEST 31ST ST	2	CIPP
2733 PROSPECT ST	2	CIPP
3615 WABASH AVE	2	CIPP
Open Cut Point Repair (OCPR)		
1527 KINGSWAY RD	14	OCPR
606 EAST 37TH ST	12	OCPR
3715 RASPE AVE	11	OCPR

3811 NORTH ROGERS AVE	11	O CPR
5412 SPRINGLAKE WAY	10	O CPR
1216 EVESHAM AVE	9	O CPR
2615 GARRETT AVE	8	O CPR
506 EAST LAKE AVE	8	O CPR
908 CHESTNUT HILL AVE	8	O CPR
2907 BELMONT AVE	7	O CPR
3811 PARKVIEW AVE	7	O CPR
630 SOUTH NEWKIRK ST	7	O CPR
14 SOUTHFIELD PL	6	O CPR
1557 LOCHWOOD RD	6	O CPR
1111 NORTH CENTRAL AVE	5	O CPR
1404 EAST COLD SPRING LN	5	O CPR
2507 OVERLAND AVE	5	O CPR
2816 GOODWOOD RD	4	O CPR
5621 SAGRA RD	4	O CPR
1231 RAMBLEWOOD RD	3	O CPR
1245 GITTINGS AVE	3	O CPR
1302 SILVERTHORNE RD	3	O CPR
1600 LIGHT ST	3	O CPR
2822 KENNEDY AVE	3	O CPR
4902 BOWLAND AVE	3	O CPR
5213 SAYBROOK RD	3	O CPR
1248 NORTH GAY ST	2	O CPR
1430 WINSTON AVE	2	O CPR
1928 WOODBOURNE AVE	2	O CPR
5626 SAGRA RD	2	O CPR
612 EAST 37TH ST	2	O CPR
6222 FALKIRK RD	2	O CPR
Root Control (RC)		
2874 MAYFIELD AVE	24	RC
3301 ELMLEY AVE	14	RC
5904 PLAINFIELD AVE	11	RC
2880 MAYFIELD AVE	8	RC
2638 MILES AVE	7	RC
3128 NORTHWAY DR	7	RC
1167 EAST NORTHERN PKWY	6	RC
2647 HAMPDEN AVE	6	RC
3324 SEQUOIA AVE	6	RC
3813 PARKMONT AVE	6	RC
5231 CEDGATE RD	6	RC
1224 CEDARCROFT RD	5	RC
2500 KEYWORTH AVE	5	RC

3029 SEAMON AVE	5	RC
3600 LOCH RAVEN BLVD	5	RC
3900 FORDS LN	5	RC
5506 FORCE RD	5	RC
733 COLORADO AVE	5	RC
1319 GLENWOOD AVE	4	RC
1441 WINSTON AVE	4	RC
2604 CECIL AVE	4	RC
3018 CHELSEA TER	4	RC
3618 WABASH AVE	4	RC
413 SOUTHWAY	4	RC
5116 FREDCREST RD	4	RC
715 WINANS WAY	4	RC
2218 MADISON AVE	3	RC
2224 KOKO LN	3	RC
2721 LOUISE AVE	3	RC
3228 ELMLEY AVE	3	RC
3305 SEVEN MILE LN	3	RC
3317 PIEDMONT AVE	3	RC
3623 OLD YORK RD	3	RC
3626 BENSON AVE	3	RC
3712 CHESHOLM RD	3	RC
3901 BARTWOOD RD	3	RC
4206 SHELDON AVE	3	RC
4410 BEDFORD PL	3	RC
4808 ABERDEEN AVE	3	RC
5009 HILLEN RD	3	RC
5501 FERNPARK AVE	3	RC
5609 WINTHROPE AVE	3	RC
611 CHERATON RD	3	RC
728 MILYER LN	3	RC
827 EAST LAKE AVE	3	RC
1245 WALKER AVE	2	RC
1405 KITMORE RD	2	RC
1553 WINSTON AVE	2	RC
1700 EAST 30TH ST	2	RC
1809 EAST BELVEDERE AVE	2	RC
2500 LIBERTY HEIGHTS AVE	2	RC
2619 PELHAM AVE	2	RC
2621 CYLBURN AVE	2	RC
3001 ELGIN AVE	2	RC
3008 PARKSIDE DR	2	RC
3016 PARKSIDE DR	2	RC

3535 OLD YORK RD	2	RC
3602 CLARENELL RD	2	RC
3810 GLENGYLE AVE	2	RC
4008 BOARMAN AVE	2	RC
4026 EDGEWOOD RD	2	RC
4211 GRANADA AVE	2	RC
5010 WEST FOREST PARK AVE	2	RC
5200 DARIEN RD	2	RC
5217 TRAMORE RD	2	RC
5552 WHITBY RD	2	RC
5811 STUART AVE	2	RC
5825 FALKIRK RD	2	RC
5909 ROLAND AVE	2	RC
5914 GLENOAK AVE	2	RC
5933 GLENKIRK RD	2	RC
604 SOMERSET RD	2	RC
611 EAST 35TH ST	2	RC
6413 ROSEMONT AVE	2	RC
910 COOKS LN	2	RC