2019 Annual

SSO and WIB Report

THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

DEPARTMENT OF
PUBLIC UTILITIES

City of Columbus
Department of Public Utilities

2019 Annual SSO and WIB Report

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I. Introduction/Purpose of Report

The City of Columbus (City) and the State of Ohio entered into a consent order in August of 2002 for the resolution of Sanitary Sewer Overflow (SSO) related concerns for the City's sanitary sewer system. In general, the Consent Order requires the City to develop and implement a Capacity, Maintenance, Operations and Management (CMOM) program. This program will address providing adequate capacity in the collection system, taking all feasible steps to address SSOs, and providing notification for overflow events.

Per the Consent Order, Section VI, paragraph 21, the City shall prepare an annual report for submittal to the Ohio EPA of all SSOs events and Water-In-Basement (WIBs) occurrences from its sewers and from its maintenance contract areas. This report provides the required information collected by the City in 2019.

Highlights from 2019 include the following:

- Dry weather SSO events totaled less than one-third of our long term average, down roughly 31% from 2018
- With above-average rainfall in 2019, the number of Water-In-Basement (WIBs) occurrences was one-half of our long-term average
- As part of the City's Project Dry Basement program, twenty-six (26) new backwater devices were installed, and seven (7) devices were replaced at an approximate cost of $82,269

II. Monitoring and Reporting of Sanitary Sewer Overflows

In August of 2002, the Division of Sewerage and Drainage (DOSD) began monitoring Designed Sanitary Relief (DSR) manholes/structures using chalk and blocks to indicate overflow activation. In addition to scheduled routes of DSR inspections, the DOSD initiated a process for internal reporting of overflows from the collection system at structures other than DSRs. This process is outlined in the Overflow Emergency Response and Notification Plan (OERNP) originally submitted to OEPA in December of 2003 and more recently revised and resubmitted to OEPA in May of 2012 and subsequently approved in September, 2015. This latest revision and resubmission were to meet a requirement of both Jackson Pike's and Southerly's WWTP NPDES permits. All known overflow occurrences are reported to OEPA on a monthly basis in accordance with the Consent Order and the WWTP's NPDES Permits.

In addition to the chalk and block method of monitoring activity at the DSRs, DOSD maintains "permanent" flow meters at five sites. These meters are located at the DSR 83 overflow weir,

near the Whittier Street Storm Tanks, at DSR 95 east of Dana Avenue on Sullivant Avenue, at DSR 244 at Roads End, at DSR 335 at the gauging station in the Park of Roses, and at DSR 156 at the alley north of Hill Avenue and west of Perry Street. In addition, "temporary" flow meters are periodically installed at DSRs to evaluate flow conditions for model development and calibration.

As defined in Section X Paragraph 31 of the Consent Order, multiple overflow occurrences at an individual location within a 24-hour period are considered a single event. As further defined in our NPDES permits, the 24-hour period has been set as midnight to midnight. Therefore, overflow occurrences that begin prior to midnight and continue until the next day are reported as two events.

Appendix A shows the status of each DSR since the consent order was signed in 2002.

III. Elimination of Designed Sanitary Relief (DSR) locations in 2019

Although no DSR locations were eliminated in 2019, efforts to reduce overflow occurrences continue through the Blueprint Columbus effort and as outlined below. Additional information related to Blueprint Columbus can be found in a separate report, the *Annual Progress Report, The Integrated Plan and 2015 WWMP Update (Integrated Plan).*

IV. Activities Performed to Reduce the Occurrence of SSOs and WIBs

In addition to the projects outlined in the Integrated Plan, the DOSD also utilizes the Fats, Oils and Grease (FOG) Control Program and a preventive maintenance cleaning program aimed at cleaning all sewers less than thirty-six (36) inches in diameter on a systematic basis to reduce the number of occurrences of SSOs and WIBs. For sewers greater than thirty-six (36) inches in diameter, the condition assessment and cleaning prioritization plan developed in 2006 continued in 2019.

As part of the FOG Program, eight (8) referrals were made to the Industrial Waste Pretreatment Group (IWPG) for investigation and enforcement of discharge violations for grease in 2019. As a result, thirty (30) Food Service Establishments (FSE) were found to be contributors of fats, oil and grease. In instances in which the origination of the FOG was attributed to FSEs, an IWPG representative met with the establishment's management to evaluate current FOG reduction practices at the facility, and to present the City's FOG Best Management Plan (BMP) regulation.

Where compliance could not be demonstrated, Notice of Violations (NOVs) were issued. A total of six (6) NOVs were issued to food service establishments for failure to maintain their FOG BMP. Of the six (6) facilities, one (1) was also cited for failure to remit a Remedial Action Plan (RAP) within the necessary deadline. In addition, there were three (3) individual Cost Recovery Assessments, and one (1) Administrative Fine issued in 2019.

Public education is an ongoing component of the City's FOG program, and the distribution of

door hangers is a method used to educate homeowners and renters on the importance of properly discarding waste grease. In 2019, two-hundred and twenty-nine (229) door hangers were distributed around the city.

In July 2013, a Memorandum of Understanding (MOU) was signed between the Division of Sewerage and Drainage (DOSD) and Columbus Public Health (CPH). The MOU allows CPH sanitarians to inspect FOG BMP documents at all Food Service Establishments during their annual food license inspection. Utilizing CPH allows all FSEs to be reviewed annually.

Any facilities found to have deficient FOG BMP documentation are referred to the IWPG for follow-up. A representative from the IWPG will visit the FSE to issue a written 30-day voluntary compliance letter and assist in the completion of the FOG BMP documentation. If the documentation is not completed within the 30-day voluntary compliance period, escalated enforcement in accordance with the Emergency Response Plan (ERP) will be used to gain compliance with the FOG BMP regulations.

On behalf of the Division of Sewerage and Drainage, the CPH performed 3,761 FOG inspections in 2019. Of the FSEs inspected, seven-hundred and seventy-four (774) were found to have at least one (1) violation or deficiency in their FOG BMP. In instances where CPH found deficient FOG BMP documentation, the FSE was referred to the IWPG for compliance.

The FOG Program has been in effect for over ten years, and has contributed to reducing the number of sanitary sewer overflow events caused by fats, oils and grease. In 2019, five (5) of the dry weather overflows were associated with grease blockages. Although this number represents a minimal increase over 2018, it is still 38% below our long-term average.

The sewershed-based preventive maintenance program initiated in late 2005 is essentially complete with just follow-up work remaining. This program prioritized and developed a cleaning schedule for the collection system based on the number of overflow events and water in basement reports and then weighted to reflect the size of the sewershed to develop a priority sequence.

With the increased focus on asset management in the collection system, evaluating a sewer's performance and remaining useful life is essential information for proper operation of a collection system. To this end, the small diameter condition assessment inspection program started in 2011 to gather information on pipe conditions so that a decision can be made on how best to manage particular pipe sections. Inspection and maintenance schedules will also be developed and decisions for rehabilitation or replacement can be made in a consistent manner. This program has now replaced the sewershed based preventive maintenance program as a tool for guiding collection system maintenance.

As a result of the Small Diameter Condition Assessment program, the DOSD has been able to better identify those sewers which are in need of rehabilitation, and focus

resources there. In 2019, the DOSD was able to rehabilitate approximately 99,000 linear feet of sewer main using Cured In Place Pipe (CIPP). This trenchless technology enables sewer rehabilitation with minimal disruption to the customer or their property while providing a lasting repair.

For sewers greater than thirty-six (36) inches in diameter, the DOSD has initiated the inspection program based on the cleaning prioritization plan developed in 2006. The cleaning prioritization plan included an assessment that used twenty-five (25) factors to evaluate the likelihood and consequence of failure. For this purpose, failure is defined as 'not meeting a level of service' and not just a physical pipe problem.

A summary of the work completed for the Cleaning Prioritization Program is included in Table 1:

Table 1: *Cleaning Prioritization Program*

Project Name	Cleaning and Rehabilitation		
	Data Collection	Recommendations	Work Status
Olentangy Main			
Phase A	Completed	Developed	Completed
Phase B	Completed	Developed	Completed
Scioto Main/West Side Relief	Completed	Developed	Completed
Scioto Main (South)	Completed	Developed	Under Design
Alum Creek North / Alum Creek Sub-Trunk	Completed	Developed	Completed
Alum Creek Middle / Alum Creek Interceptor	Completed	Developed	Phase 1 of 3 completed, Phase 2B Construction ongoing, Phase 3 project has been bid
Big Walnut, Big Walnut Outfall, Rocky Fork Sanitary Outfall	Completed	Developed	BWO going to Design. Other Sections Phased Out.
Alum Creek (South) / Deshler Tunnel	Completed	Developed	Under Design. Phased over three projects
Blacklick Creek Main Trunk, Blacklick Augmentation, Blacklick Sub-Trunk	Completed	Developed	Phased over two projects. Design of Phase I in 2020
Scioto Main (Middle)	Completed	Developed	In Design
Center LDA (Downtown combined, sanitary and storm)	Completed	Developed	In Design
Near East and North LDA (Combined sewers over 36" in these planning areas)	Completed	Developed	Developing PDR report
West Side Trunk LDA (Includes Interconnector)	Completed	Developed	Report complete Design in 2020
Scioto Main Trunk (North), Upper Scioto West Interceptor Sewer, Upper Scioto Area NW Branch Hague Ave, Frank Road Trunk, Scioto Main Trunk Sewer Replacement, West Side Relief Main Line Section 4, and Big Run Sanitary Trunk Sewer	Competed	Developed	Phased over two projects Phase I in Design Phase II future
OSIS LDA	NTP in 2020	Not yet determined	

V. Summary of Sanitary Sewer Overflows Observed in 2019

The City continues to report SSOs from its sewers and maintenance contract areas on a monthly basis in accordance with Section VI, paragraph 20 of the Consent Order. A summary list of the wet weather overflow events, based on the monthly reports described in Section II of this report, can be found in Appendix B.

During wet weather in 2019, the City observed a total of two-hundred and one (201) known SSO events at fifty-nine (59) different locations throughout the collection system. Even with above-average precipitation in 2019, the number of identified SSOs is 30% below our long-term average. Most (95%) of the SSOs occurred at design relief points (DSRs), with all but one of the remaining coming from manholes within the collection system.

Over 93% of the total wet-weather overflow events reported for 2019 occurred within the first half of the year while recording above average rainfall. Over twenty-eight (28) inches of rain fell during that period.

The largest cluster of overflow events occurred in June, when over seven (7) inches of rain fell throughout the month. These rain events resulted in sixty-three (63) overflows from the collection system which is approximately 31% of the total events reported for the year.

Our second largest period of overflow events occurred in February when nearly 5.5 inches of rain resulted in fifty (50) events. The month accounted for approximately 25% of the total events reported for the year.

The most active overflow location in 2019 was DSR 201, manhole at Oakwood & Lawrence, discharging eighteen (18) times during periods of wet-weather. The second most active, DSR 156, manhole in the alley north of Hill Avenue and west of Perry Street, had fifteen (15) events, while DSR 105, manhole at Third Avenue & Oxley, had the third highest number, with eleven (11) events.

In 2019, the DOSD identified thirteen (13) dry-weather sanitary sewer overflow events from the collection system from eight (8) different locations. Both are below our long-term average of thirty-nine (39) events over twenty-one (21) locations. In 2019, there were six (6) fewer dry overflow events reported than in 2018, at three (3) fewer locations. Of the total dry weather events, seven (7) were due to some sort of blockage in the collection system with grease contributing to five (5) of the blockages. The remaining events were attributed to a damaged pipe.
In each instance, regardless of the circumstances, DOSD mobilized personnel to resolve the situation as outlined in the OERNP.

Appendix C contains a summary of all identified dry weather overflows.

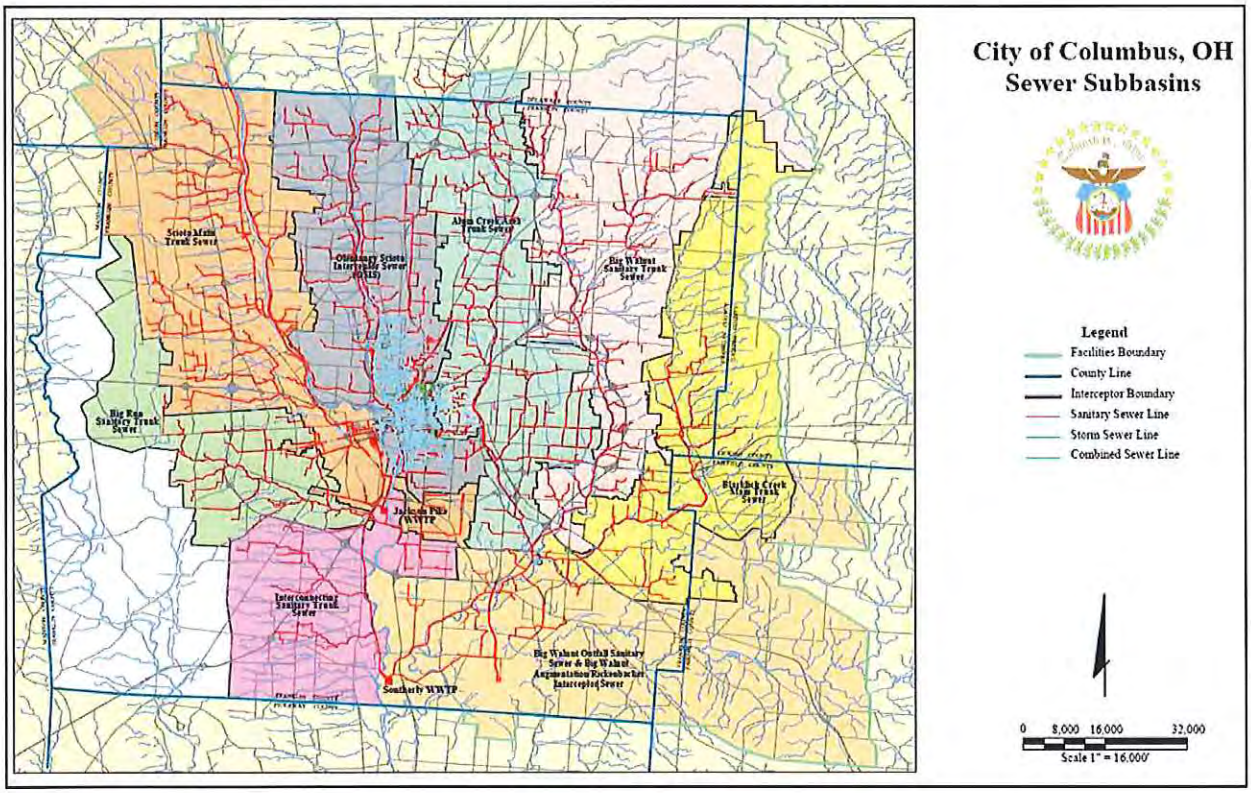
Receiving (named) waterways downstream from the SSO occurrences include the following:

Adena Brook/Indian Spring Run	Alum Creek	Big Run
Dry Run	Early Ditch	Olentangy River
Olentangy River/Turkey Run	Rush Run	Scioto River
Walhalla Ravine		

The City of Columbus sewer service area is broken down into eight sub-basins as shown in Exhibit 1. These sub-basins represent the areas served by major interceptors and are referred to as follows:

- Alum Creek Area Trunk Sewer
- Big Run Sanitary Trunk Sewer
- Big Walnut Outfall Augmentation/Rickenbacker Interceptor Sewer
- Big Walnut Sanitary Trunk Sewer
- Blacklick Creek Main Trunk Sewer
- Interconnecting Sanitary Trunk Sewer
- Olentangy Scioto Interceptor Sewer (OSIS)
- Scioto Main Trunk Sewer

Exhibit 1



The total overflows by sub-basin, including total wet weather and dry weather events, are summarized in Table 2 below:

Table 2: *Overflows by Sub-Basin*

Sub-basin	Total SSOs	Dry Weather	Wet Weather
Alum Creek Area Trunk Sewer	42	5	37
Big Run Sanitary Trunk Sewer	4	1	3
Big Walnut Outfall Interceptor Sewer	0	0	0
Big Walnut Sanitary Trunk Sewer	6	0	6
Blacklick Creek Main Trunk Sewer	0	0	0
Interconnector Trunk Sewer	0	0	0
Olentangy Scioto Interceptor Sewer	158	6	152
Scioto Main Trunk Sewer	4	1	3
Out of County	0	0	0
Totals	214	13	201

The occurrence of these most active overflows is principally a capacity-related issue. These and other capacity issues have been analyzed as part of the City's System Evaluation and Capacity Assurance Plan (SECAP) efforts submitted in 2005 and further expanded on in the December 2015 Integrated Plan, and 2015 WWMP Update.

VI. Assumptions Used to Estimate Overflow Volume at Monitored DSRs

The DOSD maintains flow monitors at four DSR sites to facilitate the overflow documentation process. These devices are located at the DSR 83 overflow weir, near the Whittier Street Storm Tanks, at DSR 95 east of Dana Avenue on Sullivant Avenue, at DSR 244 at Roads End, at DSR 335 at the gauging station in the Park of Roses, and at DSR 156 at the alley north of Hill Avenue and west of Perry Street.

The electronic flow meters measure the level in the manhole and are used to indicate an overflow event at a critical elevation. (e.g. overflow invert elevation). Based on the depth of sewage above the invert of the overflow pipe the overflow volume can be estimated using the weir equation in most cases. It is important to understand that this is an estimate, based on ideal hydraulic conditions at the location.

These calculations are based on several assumptions that might affect the overflow volume calculations. Examples of these assumptions are as follows:

1. There is a free outfall at the discharge point. In locations where the discharge point is at or near the elevation of the storm sewer or receiving stream, the calculations will not apply due to potential hydraulic restrictions at the discharge point.
2. Manning friction coefficient and weir constants are valid.
3. Actual pipe slopes match the pipe slopes given on the Record Plans.

4. Overflow pipe slopes are not severe, affecting the depth of flow used in the calculations.
5. Recorded data is valid with no error in meter electronics.
6. There is no impact from flow turbulence in the recorded data.

Appendix D shows a detailed list of flow monitored events over 1000 gallons. Where it is suspected that these assumed conditions do not exist, the event will be designated with "NA."

Appendix E shows the summary of flow monitored events less than 1000 gallons.

Appendix F shows the stipulated penalties for both the identified sanitary sewer overflows as defined in the Consent Order Section X, paragraphs 31a & 31b and for Southerly bypasses as defined in paragraph 31d.

VII. Summary of Water-In-Basement Occurrences Reported in 2019

The City has determined that one-hundred and thirty-one (131) Water-In-Basement (WIBs) occurrences reported in 2019 were attributable to problems in the public sewer.

A summary of WIBs by sub-basin is included in Table 3 below:

Table 3: *Water in Basement by Sub-Basin*

Sub-Basin	WIBs
Olentangy Scioto Interceptor Sewer	36
Alum Creek Area Trunk Sewer	72
Scioto Main Trunk Sewer	11
Big Run Sanitary Trunk Sewer	8
Big Walnut Sanitary Trunk Sewer	2
Interconnecting Sanitary Trunk Sewer	0
Blacklick Creek Main Trunk Sewer	2
Total	131

In 2019, the period with the most WIBs occurred during February, with twenty-eight (28) identified throughout all of the sub-basins. Within a two-week period in February, 4.84 inches of rain fell resulting in 21% of the total WIBs reported in 2019. On February 12th alone, 2.16 inches of rainfall resulted in nine (9) reported WIBs. The next highest reporting period occurred during mid-June while 4.79 inches of rain fell in less than one week. During that week, twenty-one (21) WIB events were reported, representing 19% of the annual total. On June 16th alone, 2.65 inches of rainfall resulted in eight (8) reported WIBs. In 2019, 73% of the identified WIBs were reported within the first six (6) months while recording above-average rainfall.

Of the total 2019 WIB events, approximately 8% of the occurrences were reported when surcharged sewers backed up into residents' homes during periods of wet weather. Other 2019 occurrences were caused by debris, roots and grease built up in the sewers. The City's Sewer Maintenance crews addressed these problems by cutting roots and cleaning debris from the sewer lines. Sewer segments exhibiting major root intrusion were added to the City's Root Control Program. When the cause of the blockage was determined to be due to grease, the locations were reported to the Division's Industrial Waste Pretreatment Group (IWPG) for investigation per the FOG Control Program.

To protect homes that experience repeat basement flooding, the City voluntarily instituted "Project Dry Basement" in 2004. Under this program, the City pays for the purchase and installation of a back-water prevention device on the house lateral. In 2019, twenty-six (26) new backwater devices were installed, and seven (7) devices were replaced at an approximate cost of $82,269. To date, the City has 1,072 homes in the program, and has expended nearly four million dollars to install the backwater prevention devices.

VIII. Report Public Notification

In 2004, the DOSD developed a web-based GIS map showing SSO discharge locations and the activity information associated with that point. This web site is accessible to the public through the Division's web page or directly at https://eapp.columbus.gov/ssocso/. The availability of this web site assists in the compliance with the requirement for public notification of overflow events outlined in the Consent Order.

As required by the Consent Order, the City of Columbus will make the public aware of this annual report by issuing a press release to the local media of its availability, and by making the report available on the Public Utilities website. Interested parties may download and print this report from the website's Document Library under Sewer Publications, located at https://www.columbus.gov/utilities/document-library/. This report will also be available at the Division's 1250 Fairwood Avenue offices, or by mail by calling (614) 645-7176.

Appendix A: DSR Status Summary

City of Columbus
DSR Status Summary - 2019

Reference Number	Location	Sewer Sub-Basin	DSR Eliminated	DSR Mitigated*	CIP/Work Order Number	Date
83	e/o Whittier St. Storm Tanks	OSIS		x	cip 737	7/2011
95	MH Sullivant Ave. & e/o Dana Ave.	Scioto Main				
96	MH alley n/o Broad St. & e/o Glenwood	Scioto Main	x		wo 1317239	10/2013
103	MH s/s of Third Ave., 290 ft. w/o Olentangy River Rd.	OSIS				
105	MH Third Ave. & Oxley (west)	OSIS				
107	MH f/o 814 W. Third Ave.	OSIS				
109	MH s/s of Third Ave., 490 ft. w/o Olentangy River Rd.	OSIS				
110	MH Third Ave. & Oxley (east)	OSIS				
111	MH s/s of Third Ave., 690 ft. w/o Olentangy River Rd.	OSIS				
132	MH Columbus & Studer	OSIS	x		cip 631	7/2006
133	MH Columbus & Linwood	OSIS	x		cip 631	7/2006
146	MH Third & Morning	OSIS				
147	MH alley n/o King & w/o Star Ave.	OSIS				
148	MH King Ave. & alley w/o Virginia	OSIS				
149	MH Fifth Ave. & North Star	OSIS				
150	MH King & North Star	OSIS				
151	MH Meadow Rd. & Third Ave.	OSIS				
154	MH Third Ave. & Virginia	OSIS				
156	MH alley n/o Hill Ave. w/o Perry St.	OSIS				
157	MH Fifth Ave. & Eastview/Kenny	OSIS				
177	MH Cole St. & alley w/o Seymour	Alum Creek				
179	MH Cole & Seymour	Alum Creek				
181	MH Cole & alley e/o Seymour	Alum Creek				
185	MH Gault & alley w/o Kelton	Alum Creek				
188	MH 2nd alley w/o Seymour, 80' n/o Gault	Alum Creek				
189	MH Cole & Bulen	Alum Creek		x	meets LOS as built	
190	MH n/s Gault & alley w/o Lilley	Alum Creek				
192	MH Columbus & alley w/o Kelton	OSIS	x		cip 631	7/2006
193	MH Gault & alley e/o Kimball	Alum Creek				
194	MH Columbus & Miller	OSIS	x		cip 631	7/2006
198	MH Bulen & Gault	OSIS	x		cip 631	4/2004
199	MH Gault & alley w/o Miller	Alum Creek				
201	MH Oakwood & Lawrence	OSIS				
203	MH Lockbourne & Lawrence	OSIS				
205	MH Bruck & alley n/o Hosack	OSIS		x	wo 1223213	11/2012
206	MH Bruck & Reeb	OSIS				
207	MH Parsons & Kian Avenue	OSIS				
208	MH Ninth & alley n/o Hosack	OSIS		x	wo 1223207	11/2012
210	MH Bruck & Woodrow	OSIS				
211	MH e/s of Parsons, front of 1954 Parsons	OSIS				
213	MH Hosack & Fourth	OSIS				
225	Dublin Rd. pump station (SA 6)	OSIS	x		N/A	2004
241	MH Preston Rd. & Fair Ave.	Alum Creek	x		wo 0702016	1/2007
244	Regulator at Roads End	Alum Creek				
246	Castle Rd. pump station (SA 2)	OSIS				
250	MH Hague Ave. n/o Mound St.	Big Run				
252	MH Wicklow & alley w/o Powell Ave.	Scioto Main				
254	MH alley n/o Sullivant Ave. e/o Roys Ave.	Scioto Main				
256	MH Binns Blvd. & alley s/o Palmetto St.	Big Run				
263	MH Velma & alley s/o Hudson	OSIS	x		cip 647	10/2004
264	MH Howey & Maynard	OSIS	x		cip 653	10/2004
266	MH Howey & Briarwood	OSIS	x		cip 647	10/2004
267	MH Akola & alley w/o Atwood Terrace	OSIS	x		cip 647	9/2004
271	MH Azelda & alley n/o Hudson	OSIS	x		cip 647	10/2004
274	MH Republic & Ontario	OSIS	x		cip 647	10/2004
275	MH Hamilton & alley n/o Duxberry	OSIS	x		cip 653	10/2004
276	MH Briarwood & alley w/o McGuffey	OSIS	x		cip 647	10/2004
279	MH Hudson & Parkwood	Alum Creek	x		cip 726	10/2009
284	MH n/o Pacemont at Olentangy River on 8 " sanitary	OSIS				
285	MH Midgard & alley e/o Indianola	OSIS				
288	MH e/o Olentangy St. & Indianola	OSIS	x		cip 671	4/2008
301	MH Alamo & alley w/o Osceola	OSIS	x		cip 658	3/2004
303	MH Akola & alley e/o Homecroft	OSIS	x		cip 647	10/2004

City of Columbus
DSR Status Summary - 2019

Reference Number	Location	Sewer Sub-Basin	DSR Eliminated	DSR Mitigated*	CIP/Work Order Number	Date
304	MH Alamo & alley w/o Pontiac	OSIS	x		cip 648	8/2005
305	MH Lakeview & alley w/o Cleveland Ave.	Alum Creek				
306	MH Bremen & alley n/o Melrose	Alum Creek		x	cip 726	8/2009
307	MH Bremen & alley n/o Weber	Alum Creek		x	cip 726	9/2009
308	MH Minnesota & Hamilton	OSIS	x		cip 655	8/2005
310	MH e/o McGuffey & Aberdeen	OSIS	x		cip 655	8/2005
312	MH alley e/o Bremen & Brighton Rd.	Alum Creek				
314	MH s/s Weber, alley w/o Cleveland	Alum Creek		x	cip 726	9/2009
315	MH Eddystone & Suwanee	Alum Creek				
317	MH Aberdeen & Parkwood	Alum Creek	x		wo 1317204	11/2013
322	Williams Rd. pump station (SA 1)	OSIS				
323	MH Webster Pk. & Olentangy Blvd.	OSIS				
326	MH Olentangy Blvd. & Montrose Way	OSIS				
328	MH Como & High	OSIS				
329	MH e/s Indianola & alley n/o East North Broadway	OSIS				
330	MH Pauline & Atwood Terrace	OSIS	x		cip 651	1/2007
335	Gauging station in Park of Roses	OSIS				
337	MH Richards & Granden	OSIS				
338	MH Northridge & Atwood Terrace	OSIS	x		cip 651	1/2007
339	MH alley w/o Cleveland & n/o Ferris	Alum Creek				
346	MH 200' w/o Rustic Pl. & Olentangy Blvd.	OSIS				
349	MH alley e/o High & s/o Schreyer Pl.	OSIS				
350	MH Wetmore & alley e/o High St.	OSIS	x		cip 670	7/2007
351	MH r/o 4895 Olentangy Blvd., w/o Olentangy Blvd. & n/o	OSIS				
352	MH n/s of Weisheimer & Starrett	OSIS				
360	MH s/o Rathbone, e/o Delawanda	OSIS				
364	MH Plum Ridge n/o Lornaberry	Big Walnut				
368	MH alley e/o High, s/o Lincoln	OSIS				
380	MH Lexington & alley n/o Hudson	OSIS	x		cip 654	2005
381	MH Maynard & Velma	OSIS	x		cip 647	10/2004
399	Structure r/o 2250 McKinley	Scioto Main				
532	MH f/o 2145 Winslow	Alum Creek	x		wo 0917302	10/2009
576	MH f/o 320 Kanawha	OSIS	x		cip 681	6/2008
655	MH Seymour & Livingston	OSIS	x		cip 635	7/2006
873	MH S.R. 315 N.B. off ramp to Henderson	OSIS				
898	MH California & High	OSIS				
915	MH in North Star, n/o Presidential	OSIS				
948	r/o 3511 Penfield	Big Walnut	x		wo 1004541	5/2010
952	Hudson & alley w/o Parkwood	Alum Creek		x	cip 726	10/2009

* To the WWMP Level of Service

Appendix B: Annual Summary of Wet Weather Overflows

City of Columbus
Annual Summary of Wet Weather Overflows - 2019

Location	Reference Number	Estimated Date and Time - if known						Receiving Water - if any	Sewer Component	Sewer Sub-Basin
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	reported	2/7	21:00	and	2/7	23:55	Scioto River	Design Relief	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	reported	2/8	0:00	and	2/8	6:30	Scioto River	Design Relief	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	reported	2/12	12:45	and	2/12	23:55	Scioto River	Design Relief	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	reported	2/13	0:00	and	2/13	2:00	Scioto River	Design Relief	OSIS
e/o Whittier St. Storm Tanks:Deshler Tunl/Franklin Main	83	reported	6/20	3:30	and	6/20	7:30	Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	95	at least once between	3/28		and	4/4		Scioto River	Design Relief	Scioto Main
MH Sullivant Ave. & e/o Dana Ave.	95	at least once between	5/2		and	5/9		Scioto River	Design Relief	Scioto Main
MH Sullivant Ave. & e/o Dana Ave.	95	at least once between	6/13		and	6/20		Scioto River	Design Relief	Scioto Main
MH s/s of Third Ave., 290 ft. w/o Olentangy River Rd.	103	at least once between	1/24		and	2/7		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 290 ft. w/o Olentangy River Rd.	103	at least once between	2/7		and	2/14		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 290 ft. w/o Olentangy River Rd.	103	at least once between	5/16		and	5/23		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 290 ft. w/o Olentangy River Rd.	103	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
Olentangy River at 72 inch storm sewer s/o Fifth Avenue	105	at least once between	12/28		and	1/3		Olentangy River	Design Relief	OSIS
Olentangy River at 72 inch storm sewer s/o Fifth Avenue	105	at least once between	1/23		and	1/24		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	2/7		and	2/8		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	2/8		and	2/14		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	2/15		and	2/21		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	3/29		and	4/4		Olentangy River	Design Relief	OSIS
MH in North Star, n/o Presidential	105	at least once between	4/12		and	4/18		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	5/16		and	5/17		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	6/20		and	6/21		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	7/19		and	7/25		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	105	at least once between	8/30		and	9/5		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 490 ft. w/o Olentangy River Rd.	109	at least once between	1/24		and	2/7		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 490 ft. w/o Olentangy River Rd.	109	at least once between	2/7		and	2/14		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 490 ft. w/o Olentangy River Rd.	109	at least once between	5/16		and	5/23		Olentangy River	Design Relief	OSIS
MH s/s of Third Ave., 490 ft. w/o Olentangy River Rd.	109	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
MH Third Ave. & Oxley (east)	110	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
MH Hague Ave. n/o Mound St.	146	at least once between	3/28		and	4/4		Olentangy River	Design Relief	OSIS
MH Third & Morning	146	at least once between	7/11		and	7/18		Olentangy River	Design Relief	OSIS
MH alley n/o King & w/o Star Ave.	147	at least once between	3/28		and	4/4		Olentangy River	Design Relief	OSIS
MH King Ave. & alley w/o Virginia	148	at least once between	2/8		and	2/14		Olentangy River	Design Relief	OSIS
MH King Ave. & alley w/o Virginia	148	at least once between	6/14		and	6/20		Olentangy River	Design Relief	OSIS
MH King Ave. & alley w/o Virginia	148	at least once between	6/20		and	6/21		Olentangy River	Design Relief	OSIS
MH King Ave. & alley w/o Virginia	148	at least once between	7/12		and	7/18		Olentangy River	Design Relief	OSIS
MH Fifth Ave. & North Star	149	at least once between	2/7		and	2/14		Olentangy River	Design Relief	OSIS
MH Fifth Ave. & North Star	149	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
Olentangy River at 60 inch storm sewer s/o King Avenue	150	at least once between	1/10		and	1/17		Olentangy River	Design Relief	OSIS
MH King & North Star	150	at least once between	1/24		and	2/7		Olentangy River	Design Relief	OSIS
MH King & North Star	150	at least once between	2/14		and	2/21		Olentangy River	Design Relief	OSIS
MH King & North Star	150	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
Olentangy River at 72 inch storm sewer s/o Fifth Avenue	151	at least once between	12/28		and	1/3		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	1/25		and	2/7		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	2/7		and	2/8		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	2/8		and	2/14		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	3/8		and	3/14		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	5/16		and	5/17		Olentangy River	Design Relief	OSIS
MH Meadow Rd. & Third Ave.	151	at least once between	6/14		and	6/20		Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/1	0:00	and	1/1	0:10	Olentangy River	Design Relief	OSIS

Location	Reference Number	Estimated Date and Time - if known						Receiving Water - if any	Sewer Component	Sewer Sub-Basin
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/19	19:15	and	1/19	21:00	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/23	21:20	and	1/23	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/23	14:05	and	1/23	15:15	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/24	8:55	and	1/24	11:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	1/24	0:00	and	1/24	6:40	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/6	9:00	and	2/6	19:15	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/7	14:20	and	2/7	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/8	0:00	and	2/8	7:20	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/12	4:50	and	2/12	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/13	0:00	and	2/13	2:40	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/20	6:25	and	2/20	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	2/21	0:00	and	2/21	0:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	3/9	19:00	and	3/9	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	3/10	0:00	and	3/10	2:35	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	3/14	21:50	and	3/14	23:55	Olentangy River	Design Relief	OSIS
MH alley n/o Hill Ave. w/o Perry St.	156	reported	3/15	0:00	and	3/15	0:35	Olentangy River	Design Relief	OSIS
MH Fifth Ave. & Eastview/Kenny	157	at least once between	2/7		and	2/14		Olentangy River	Design Relief	OSIS
MH Fifth Ave. & Eastview/Kenny	157	at least once between	6/13		and	6/20		Olentangy River	Design Relief	OSIS
MH Fifth Ave. & Eastview/Kenny	157	at least once between	7/11		and	7/18		Olentangy River	Design Relief	OSIS
MH Cole St. & alley w/o Seymour	177	at least once between	1/29		and	2/6		Alum Creek	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	2/6		and	2/13		Alum Creek	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	3/6		and	3/13		Alum Creek	Design Relief	Alum Creek
MH Third & Morning	177	at least once between	3/27		and	4/3		Alum Creek	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	5/15		and	5/22		Alum Creek	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	6/19		and	6/26		Alum Creek	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	11/20		and	11/27		Alum Creek at 108" storm sewer in Kenton	Design Relief	Alum Creek
MH Cole St. & alley w/o Seymour	177	at least once between	11/27		and	12/4		Alum Creek	Design Relief	Alum Creek
MH Cole & alley e/o Seymour	181	at least once between	5/29		and	6/5		Alum Creek	Design Relief	Alum Creek
MH Cole & Bulen	189	at least once between	6/19		and	6/26		Alum Creek	Design Relief	Alum Creek
MH Gault & alley e/o Kimball	193	at least once between	6/19		and	6/26		Alum Creek	Design Relief	Alum Creek
MH Gault & alley w/o Miller	199	at least once between	6/19		and	6/26		Alum Creek	Design Relief	Alum Creek
Scioto River at 122 inch storm sewer n/o S.R. 104, 2500 feet w/o Barthman & High	201	at least once between	12/28		and	1/2		Scioto River	Design Relief	OSIS
Scioto River at 122 inch storm sewer n/o S.R. 104, 2500 feet w/o Barthman & High	201	at least once between	1/18		and	1/23		Scioto River	Design Relief	OSIS
Scioto River at 122 inch storm sewer n/o S.R. 104, 2500 feet w/o Barthman & High	201	at least once between	1/23		and	1/25		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	1/29		and	2/6		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	2/6		and	2/8		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	2/8		and	2/13		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	2/20		and	2/22		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	3/8		and	3/13		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	3/13		and	3/15		Scioto River	Design Relief	OSIS
MH Third Ave. & Oxley (west)	201	at least once between	3/29		and	4/3		Scioto River	Design Relief	OSIS
MH Sullivant Ave. & e/o Dana Ave.	201	at least once between	4/24		and	4/26		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	4/26		and	5/1		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	5/10		and	5/15		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	5/15		and	5/17		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	5/31		and	6/5		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	6/14		and	6/19		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	6/19		and	6/21		Scioto River	Design Relief	OSIS
MH Oakwood & Lawrence	201	at least once between	6/21		and	6/26		Scioto River	Design Relief	OSIS
MH Plum Ridge n/o Lornaberry	203	at least once between	3/27		and	4/3		Scioto River	Design Relief	OSIS
MH Lockbourne & Lawrence	203	at least once between	5/8		and	5/15		Scioto River	Design Relief	OSIS

Location	Reference Number	Estimated Date and Time - if known						Receiving Water - if any	Sewer Component	Sewer Sub-Basin
MH Lockbourne & Lawrence	203	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH Bruck & alley n/o Hosack	205	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH Bruck & Reeb	206	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH Parsons & Kian Avenue	207	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH Ninth & alley n/o Hosack	208	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH Bruck & Woodrow	210	at least once between	5/29		and	6/5		Scioto River	Design Relief	OSIS
MH Bruck & Woodrow	210	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
MH e/s of Parsons, front of 1954 Parsons	211	at least once between	6/19		and	6/26		Scioto River	Design Relief	OSIS
chamber at Roads End	244	reported	3/30	23:15	and	3/30	23:55	Alum Creek	Design Relief	Alum Creek
chamber at Roads End	244	reported	3/31	0:00	and	3/31	4:30	Alum Creek	Design Relief	Alum Creek
MH Lockbourne & Lawrence	250	at least once between	3/28		and	4/4		Early Ditch	Design Relief	Big Run
MH Binns Blvd. & alley s/o Palmetto St.	256	at least once between	5/16		and	5/23		Early Ditch	Design Relief	Big Run
MH Binns Blvd. & alley s/o Palmetto St.	256	at least once between	8/29		and	9/5		Early Ditch	Design Relief	Big Run
MH n/o Pacemont at Olentangy River on 8" sanitary	284	at least once between	2/5		and	2/12		Olentangy River	Design Relief	OSIS
MH n/o Pacemont at Olentangy River on 8" sanitary	284	at least once between	3/5		and	3/12		Olentangy River	Design Relief	OSIS
MH n/o Pacemont at Olentangy River on 8" sanitary	284	at least once between	3/19		and	3/26		Olentangy River	Design Relief	OSIS
MH n/o Pacemont at Olentangy River on 8" san	284	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH Oakwood & Lawrence	285	at least once between	3/26		and	4/2		Walhalla Ravine	Design Relief	OSIS
MH Midgard & alley e/o Indianola	285	at least once between	6/18		and	6/25		Walhalla Ravine at Walhalla & Diana	Design Relief	OSIS
ditch e/o Perdue & n/o Aberdeen	305	at least once between	12/31		and	1/4		Alum Creek	Design Relief	Alum Creek
ditch e/o Perdue & n/o Aberdeen	305	at least once between	1/18		and	1/22		Alum Creek	Design Relief	Alum Creek
ditch e/o Perdue & n/o Aberdeen	305	at least once between	1/22		and	1/25		Alum Creek	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	2/4		and	2/8		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	2/19		and	2/22		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	3/11		and	3/15		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	6/14		and	6/17		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	6/21		and	6/24		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Lakeview & alley w/o Cleveland Ave.	305	at least once between	6/24		and	6/28		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Bremen & alley n/o Melrose	306	at least once between	2/4		and	2/8		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Bremen & alley n/o Melrose	306	at least once between	2/15		and	2/19		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Bremen & alley n/o Melrose	306	at least once between	3/8		and	3/11		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Bremen & alley n/o Melrose	306	at least once between	6/14		and	6/17		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Bremen & alley n/o Melrose	306	at least once between	6/21		and	6/24		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH alley e/o Bremen & Brighton Rd.	312	at least once between	6/17		and	6/21		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Eddystone & Suwanee	315	at least once between	2/11		and	2/19		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Eddystone & Suwanee	315	at least once between	5/13		and	5/20		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Eddystone & Suwanee	315	at least once between	6/10		and	6/17		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Eddystone & Suwanee	315	at least once between	6/17		and	6/24		ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
Eddystone Ave. & Suwane Rd.	315	discovered	9/23	10:30	to	9/23	11:15	ditch e/o Perdue & n/o Aberdeen	Design Relief	Alum Creek
MH Webster Pk. & Olentangy Blvd.	323	at least once between	2/5		and	2/12		ditch on s/s of Webster Park w/o Olentangy Blvd.	Design Relief	OSIS
MH Webster Pk. & Olentangy Blvd.	323	at least once between	6/18		and	6/25		ditch on s/s of Webster Park w/o Olentangy Blvd.	Design Relief	OSIS
MH Olentangy Blvd. & Montrose Way	326	at least once between	2/5		and	2/12		Olentangy River	Design Relief	OSIS
MH Olentangy Blvd. & Montrose Way	326	at least once between	3/5		and	3/12		Olentangy River	Design Relief	OSIS
MH Olentangy Blvd. & Montrose Way	326	at least once between	5/21		and	5/28		Olentangy River	Design Relief	OSIS
MH Olentangy Blvd. & Montrose Way	326	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH Olentangy Blvd. & Montrose Way	326	at least once between	8/27		and	9/3		Olentangy River	Design Relief	OSIS
MH Cole St. & alley w/o Seymour	328	at least once between	3/26		and	4/2		Olentangy River	Design Relief	OSIS
MH Como & High	328	at least once between	6/11		and	6/18		Olentangy River	Design Relief	OSIS
MH Como & High	328	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH California & High	329	at least once between	3/26		and	4/2		Walhalla Ravine	Design Relief	OSIS
MH e/s Indianola & alley n/o EN Broadway	329	at least once between	6/11		and	6/18		Walhalla Ravine at Walhalla & Diana	Design Relief	OSIS

Location	Reference Number	Estimated Date and Time - if known						Receiving Water - if any	Sewer Component	Sewer Sub-Basin
MH e/s Indianola & alley n/o East North Broadway	329	at least once between	6/18		and	6/25		Walhalla Ravine at Walhalla & Diana	Design Relief	OSIS
MH e/s Indianola & alley n/o East North Broadway	329	at least once between	8/27		and	9/3		Walhalla Ravine	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	2/12	7:15	and	2/12	13:00	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	3/9	21:00	and	3/9	23:15	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	3/30	20:45	and	3/30	23:55	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	3/31	0:00	and	3/31	4:15	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	6/18	21:30	and	6/18	23:55	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	6/19	20:30	and	6/19	23:55	Adena Brook/Indian Spring Run	Design Relief	OSIS
Gauging station in Park of Roses	335	reported	6/20	0:00	and	6/20	2:15	Adena Brook/Indian Spring Run	Design Relief	OSIS
MH Richards & Granden	337	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH Richards & Granden	337	at least once between	8/27		and	9/3		Olentangy River	Design Relief	OSIS
MH alley w/o Cleveland & n/o Ferris	339	at least once between	2/11		and	2/19		ditch e/o Cleveland & s/o Ferris	Design Relief	Alum Creek
MH alley w/o Cleveland & n/o Ferris	339	at least once between	3/4		and	3/11		ditch e/o Cleveland & s/o Ferris	Design Relief	Alum Creek
Olentangy River w/o relief	346	at least once between	12/28		and	1/2		Olentangy River	Design Relief	OSIS
Olentangy River w/o relief	346	at least once between	1/22		and	1/25		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	2/5		and	2/8		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	2/8		and	2/12		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	5/24		and	5/28		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	5/28		and	5/31		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	6/18		and	6/21		Olentangy River	Design Relief	OSIS
MH 200' w/o Rustic Pl. & Olentangy Blvd.	346	at least once between	8/30		and	9/3		Olentangy River	Design Relief	OSIS
MH n/s of Weisheimer & Starrett	351	at least once between	3/26		and	4/2		Olentangy River	Design Relief	OSIS
MH r/o 4895 Olentangy Bl., w/o Olentangy Bl. & n/o Royal Forest	351	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH n/s of Weisheimer & Starrett	352	at least once between	2/5		and	2/12		Olentangy River	Design Relief	OSIS
MH r/o 4895 Olentangy Bl., w/o Olentangy Bl. & n/o Royal Forest	352	at least once between	3/26		and	4/2		Olentangy River	Design Relief	OSIS
MH n/s of Weisheimer & Starrett	352	at least once between	5/21		and	5/28		Olentangy River	Design Relief	OSIS
MH n/s of Weisheimer & Starrett	352	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH s/o Rathbone, e/o Delawanda	360	at least once between	6/18		and	6/25		ditch s/o Rathbone & Delawanda	Design Relief	OSIS
MH Plum Ridge n/o Lornaberry	364	at least once between	2/6		and	2/13		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH Plum Ridge n/o Lornaberry	364	at least once between	3/6		and	3/13		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH Plum Ridge n/o Lornaberry	364	at least once between	3/13		and	3/20		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH e/s Indianola & alley n/o East North Broadway	364	at least once between	3/27		and	4/3		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH Plum Ridge n/o Lornaberry	364	at least once between	6/19		and	6/26		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH Plum Ridge n/o Lornaberry	364	at least once between	8/28		and	9/4		ditch n/s Main & w/o McNaughten	Design Relief	Big Walnut
MH alley e/o High, s/o Lincoln	368	at least once between	6/18		and	6/25		Rush Run	Design Relief	OSIS
MH S.R. 315 N.B. off ramp to Henderson	873	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH Como & High	898	at least once between	3/26		and	4/2		Olentangy River	Design Relief	OSIS
MH California & High	898	at least once between	6/11		and	6/18		Olentangy River	Design Relief	OSIS
MH California & High	898	at least once between	6/18		and	6/25		Olentangy River	Design Relief	OSIS
MH in North Star, n/o Presidential	915	at least once between	3/21		and	3/28		ditch n/o Chambers, e/o Northwest Blvd.	Design Relief	OSIS
MH Midgard & alley e/o Indianola	915	at least once between	3/28		and	4/4		ditch n/o Chambers, e/o Northwest Blvd.	Design Relief	OSIS
MH in North Star, n/o Presidential	915	at least once between	6/13		and	6/20		ditch n/o Chambers, e/o Northwest Blvd.	Design Relief	OSIS
n/o 303 N Eureka Avenue	0046S03590358	discovered	9/10	14:00	to	9/10	17:15	Dry Run	Pipe	Scioto Main
Castle Rd.	0068S05410542	discovered	6/27	13:30	to	7/2	8:00	N/A	Force Main	OSIS
483 Annadale	0175S0100	reported	2/12	8:30	and	2/13	10:30	Olentangy River	manhole	OSIS
483 Annadale Dr	0175S0100	reported	6/20	1:00	to	6/20	1:30	Olentangy River/ Turkey Run	Manhole	OSIS
1620 Striebel Rd.	0191S0357	reported	8/26	10:15	to	8/26	11:30	N/A	manhole	Alum Creek
541 Teteridge Road	0232S0083	reported	3/31	12:04	to	3/31	12:30	Olentangy River	manhole	OSIS
4355 Olentangy River Road	0232S0105	reported	3/31	12:50	to	3/31	15:30	Olentangy River	manhole	OSIS
4355 Olentangy River Rd	0232S0105	reported	6/20	0:00	to	6/20	0:30	Olentangy River	Manhole	OSIS
64 Overbrook / Overbrook Ravine	0232S0257	reported	6/20	2:00	to	6/20	2:39	N/A	Manhole	OSIS

Location	Reference Number	Estimated Date and Time - if known							Receiving Water - if any	Sewer Component	Sewer Sub-Basin
632 Mustang Canyon Dr.	0279S0485	reported	5/28	17:15	to	5/28	23:30		Big Run	manhole	Big Run
4100 Cleveland Ave.	0301S0046	reported	5/15	18:30	to	5/15	19:15		Tributary of Alum Creek	manhole	Alum Creek
Parkridge Park near 4496 Brokaw Drive	0376S0161	reported	4/9	13:40	to	4/9	14:20		Alum Creek	manhole	Alum Creek
500 Broad Meadows Blvd	0451S0052	reported	2/12	11:30	and	2/13	10:00		Olentangy River	manhole	OSIS
5193 Northcliff Loop W	0454S05730572	reported	6/17	10:00	to	6/17	14:30		N/A	Curb Line	Alum Creek
1873 Tamarack Circle	0454S0581	reported	7/9	10:53	to	7/9	12:10		N/A Contained on ground	manhole	Alum Creek
5226 Northtowne Blvd.	0455S0043	reported	12/6	9:26	to	12/6	10:30		N/A	manhole	Alum Creek

Appendix C: Annual Summary of Dry Weather Overflows

City of Columbus
Annual Summary of Dry Weather Overflows - 2019

Location	Reference Number	Estimated Date and Time - if known						Receiving Water - if any	Sewer Component	Cause	Reduction/Elimination/Prevention
4100 Cleveland Ave.	0301S0046	reported	5/15	18:30	to	5/15	19:15	Tributary of Alum Creek	manhole	grease	Secured and cleaned site
632 Mustang Canyon Dr.	0279S0485	reported	5/28	17:15	to	5/28	23:30	Big Run	manhole	debris	Secured and cleaned site
Castle Rd.	0068S05410542	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
Castle Rd.	0068S05410543	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
Castle Rd.	0068S05410544	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
Castle Rd.	0068S05410545	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
Castle Rd.	0068S05410546	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
Castle Rd.	0068S05410547	reported	6/27	13:30	to	7/2	8:00	NA	force main	damaged pipe	Secured and cleaned site
1873 Tamarack Circle	0454S0581	reported	7/9	10:53	to	7/9	12:10	NA	manhole	grease/roots	Secured and cleaned site
1620 Striebel Rd.	0191S0357	reported	8/26	10:15	to	8/26	11:30	NA	manhole	grease/roots	Secured and cleaned site
n/o 303 N Eureka Avenue	0046S03590358	reported	9/10	14:00	to	9/10	17:15	Dry Run	pipe	damaged pipe	Secured and cleaned site
Eddystone Ave. & Suwane Rd.	315	discovered	9/23	10:30	to	9/23	11:15	ditch e/o Perdue & n/o Aberdeen	design relief	grease	Secured and cleaned site
5226 Northtowne Blvd.	0455S0043	discovered	12/6	9:26	to	12/6	10:30	NA	manhole	grease, roots, debris	Secured and cleaned site

Appendix D: Summary of Flow Monitored Overflow Events Greater Than 1000 Gallons

City of Columbus
Summary of Flow Monitored Overflow Events
Greater than 1000 Gallons - 2019

Location	Reference Number	Date	Estimated Volume (mg)	Sewer Sub-Basin
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	2/7	5.176	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	2/8	11.130	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	2/12	8.781	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	2/13	0.498	OSIS
e/o Whittier St. Storm Tanks (Deshler Tunnel/Franklin Main)	83	6/20	2.228	OSIS
chamber at Roads End	244	3/30	0.001	Alum Creek
chamber at Roads End	244	3/31	0.216	Alum Creek
Gauging station in Park of Roses	335	3/9	0.098	OSIS
Gauging station in Park of Roses	335	3/30	0.529	OSIS
Gauging station in Park of Roses	335	3/31	0.533	OSIS
Gauging station in Park of Roses	335	6/18	0.107	OSIS
Gauging station in Park of Roses	335	6/19	0.530	OSIS
Gauging station in Park of Roses	335	6/20	0.172	OSIS

Appendix E: Summary of Flow Monitored Overflow Events Less Than 1000 Gallons

City of Columbus
Summary of Flow Monitored Overflow Events
Less than 1000 Gallons - 2019

Location	Reference Number	Number of Events	Sewer Sub-Basin
None Recorded			

Appendix F: Summary of Stipulated Penalties

City of Columbus
Summary of Stipulated Annual Penalties - 2019

Overflow Type	# of Events	Penalty *	Total
Wet Weather SSOs	201	$ 2,500	$ 2,500
Dry Weather SSOs	13	$1,500 each	$19,500
Southerly WWTP Bypass 2/8, 2/12, 2/13, 3/31	4	$2,000 each	$ 8,000
Total			$30,000 **

* Penalty Tiers

1 to 250 wet weather events / yr.	$2,500
251 to 500 wet weather events / yr.	$12,500
Over 500 wet weather events / yr.	$20,000

** Stipulated penalty to be paid to OEPA