

2020 ANNUAL NOTICE

COMBINED SEWER OVERFLOW NOTIFICATION PLAN

for the

**City of Akron
Water Reclamation Services**



2020 ANNUAL NOTICE

COMBINED SEWER OVERFLOW NOTIFICATION PLAN

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Introduction and Background

The City of Akron has developed a Combined Sewer Overflow Notification Plan (the “Plan”) to comply with the requirements of 40 C.F.R. § 122.38. This regulation requires that a permittee authorized to discharge combined sewer overflows (“CSOs”) to the Great Lakes Basin must provide public notification, as described within the rule, as well as develop a notification plan.

The City of Akron sewer collection system includes both separate sanitary sewers and combined sewers (i.e. sewers that carry both sanitary flows and storm water in the same pipe). The combined sewers are located within the older central core of the City. The combined sewer system includes CSO outfalls that discharge to surface waters when the flow exceeds the capacity of the combined sewers. Intercepted flows are theoretically controlled by drop inlet or “limiting pipe” racks located in the invert of the combined sewer trunks at their connection points to the Ohio Canal Interceptor (OCI), the Little Cuyahoga Interceptor, the Northside Interceptor, the Camp Brook Trunk Sewer, and the Main Outfall Sewer. These racks function as static control devices, which intercept all dry weather flow, while limiting flow to the interceptor sewers during rainfall events. The “limiting pipe” consists of a small diameter conduit connecting the drop inlet to the interceptor sewer and serves as a connection between the interceptor sewers and the combined sewer system. The drop inlet is covered with a horizontal bar rack to prevent clogging of the connection. The bar rack accounts for the name “Rack” that is given to each regulator.

The City of Akron’s Water Reclamation Facility (WRF) and sewer collection system is regulated under a National Pollution Discharge Elimination System (NPDES) permit that has been issued by the Ohio EPA (Permit #3PF00000). This permit authorizes the discharges of CSOs at certain locations within the system.

The City is in the process of installing controls to reduce the volume and frequency of CSOs from the sewer system. The controls are being installed in accordance with a federal Consent Decree and a CSO Long Term Control Plan that has been approved by both the U.S. Environmental Protection Agency (“EPA”) and the Ohio EPA.

Overview of the Annual Notice

The U.S. EPA adopted 40 C.F.R. §122.38 to implement section 425 of the Consolidated Appropriations Act of 2016, which requires U.S. EPA to work with the Great Lakes States to establish public notification requirements for CSO discharges to the Great Lakes Basin.

The requirements of the regulation include providing an Annual Notice that is designed to describe and summarize the CSO discharges from the permittee’s discharge point(s) that occurred in the previous calendar year. This Annual Notice includes data for 2020.

Copies of the CSONP Annual Notice will be posted to the CSO Notification web page at <http://www.akronwaterwaysrenewed.com/cso.aspx> and distributed to the following departments and functional positions:

- U.S. EPA (email sent to: NPDES_CS0@epa.gov)
- Ohio EPA, David Brumbaugh – Environmental Specialist II (Central Office) and Ermelindo Gomes – Environmental Engineer (Northeast District Office)
- Summit County Public Health, Health Commissioner
- Summit Metro Parks, Superintendent
- Cuyahoga Valley National Park

- City of Akron, Water Reclamation Services
- City of Akron, Director of Public Service
- City of Cuyahoga Falls, City Engineer

The elements that must be included within this Annual Notice are set forth in 40 C.F.R. § 122.38(b). Each required element is discussed in the following sections.

CSO Discharge Point Locations

(1) A description of the location and receiving water for each CSO discharge point and, if applicable, any treatment provided;

Table 1. CSO Discharge Point Locations

Permit Outfall Number	Location	Latitude			Longitude			Receiving Water
		DEG	MIN	SEC	DEG	MIN	SEC	
3PF00000046	Rack 3 – Kelly Ave.	41	03	50.4	81	28	52.5	Little Cuyahoga River
3PF00000047	Rack 4 – Mill St.	41	05	01.1	81	31	13.0	Ohio and Erie Canal
3PF00000049	Rack 6 – Factory St.	41	03	54.1	81	29	04.8	Little Cuyahoga River
3PF00000053	Rack 10 – Case Ave. – Newton St. District	41	04	29.6	81	29	03.4	Little Cuyahoga River
3PF00000054	Rack 11 – Hazel St. – District 4	41	04	45.4	81	29	08.7	Little Cuyahoga River
3PF00000055	Former Rack 12 – Camp Brook Storage Basin	41	05	34.5	81	29	00.7	Camp Brook
3PF00000057	Former Rack 14 – Forge Field Storage Basin	41	05	07.6	81	29	43.1	Little Cuyahoga River
3PF00000058	Former Rack 15 – Cascade Village Storage Basin	41	05	26.7	81	30	15.8	Little Cuyahoga River
3PF00000059	Rack 16 – Wolf Ledges Trunk	41	04	44.4	81	31	23.2	Ohio and Erie Canal
3PF00000060	Rack 17 – Exchange St.	41	04	44.8	81	31	22.5	Ohio and Erie Canal
3PF00000061	Rack 18 – Willow Run Trunk	41	05	10.9	81	31	08.7	Ohio and Erie Canal
3PF00000062	Rack 19 – West Market St.	41	05	10.5	81	31	08.6	Ohio and Erie Canal
3PF00000063	Rack 20 – West North St.	41	05	28.1	81	31	04.2	Ohio and Erie Canal
3PF00000065	Former Rack 22 – Howard Street Storage Basin	41	05	34.3	81	31	05.3	Little Cuyahoga River
3PF00000066	Rack 23 – North Maple St.	41	05	37.9	81	31	10.4	Little Cuyahoga River
3PF00000067	Rack 24 – West Market St Outlet @ Ravine St.	41	05	38.7	81	31	16.4	Little Cuyahoga River
3PF00000069	Rack 26 – Aqueduct St outlet E. of Hickory St.	41	06	05.4	81	31	39.9	Little Cuyahoga River
3PF00000070	Rack 27 – Uhler Ave. @ Memorial Parkway	41	06	14.7	81	31	38.1	Little Cuyahoga River
3PF00000071	Rack 28 – Memorial Parkway @ Hickory St.	41	06	14.6	81	31	39.5	Little Cuyahoga River
3PF00000072	Rack 29 – Uhler Ave. – Carpenter St. Outlet	41	06	29.9	81	31	39.5	Little Cuyahoga River
3PF00000075	Rack 32 – Carpenter Heights District @ Cascade Park Rd.	41	07	03.6	81	31	19.5	Cuyahoga River
3PF00000076	Rack 33 – North Side Interceptor @ Main St.	41	07	23.0	81	30	38.3	Cuyahoga River
3PF00000077	Rack 34 – Riverside Dr. District @ MetroParks Rd.	41	07	23.6	81	29	54.7	Cuyahoga River
3PF00000078	Rack 35 – Gorge Blvd. District @ Front St. Bridge	41	07	04.4	81	29	37.6	Cuyahoga River
3PF00000080	Rack 37 – Bowery Street	41	04	49.8	81	31	12.1	Ohio and Erie Canal
3PF00000081	Former Racks 2N & 2S – Goodyear Retention Tank 1376 9th Ave.	41	03	33.8	81	28	29.2	Little Cuyahoga River
3PF00000083	Former Racks 31/40 – Cuyahoga Street Storage Facility	41	06	46.3	81	31	39.4	Little Cuyahoga River
3PF00000084	Ohio Canal Interceptor Tunnel	41	05	40.9	81	31	21.1	Little Cuyahoga River

CSO Occurrences and Overflow Volume

(2) *The date, location, approximate duration, measured or estimated volume and cause (e.g., rainfall, snowmelt) of each CSO discharge during the past calendar year.*

CSO Occurrences and Overflow Volume are contained in Appendix A.

Dry Weather Overflows

(3) *The date, location, approximate duration, measured or estimated volume, and cause of each dry weather CSO discharge during the past calendar year.*

There were four dry weather overflows at CSO discharge points in 2020.

Table 2. CSO Dry Weather Overflows

Date of Incident	Location Address/Structure Name	Duration In hours	Estimated Volume In Gallons	Cause (FOG, Roots, etc.) * = added to PM trouble list	24-Hour Notification Provided to OEPA	Date of Written Notification
2/2/20	CSO Rack 34	4hr 27min	0.0287 MGAL	Debris on Rack	2/2/20	2/4/20
3/8/20	CSO Rack 11	45 min	0.0001 MGAL	Bypass Pumping Equipment Failure	3/8/20	3/13/20
8/13/20	CSO Rack 33	15 min	0.0016 MGAL	Water Main Break	8/13/20	8/17/20
11/19/20	CSO Rack 26	34 min	0.0008 MGAL	Leaves and Debris	11/19/20	11/23/20

Other CSO Monitoring

(4) *A summary of available monitoring data for CSO discharges from the past calendar year.*

CSO Occurrences and Overflow Volume are contained in Appendix A.

All other CSO monitoring is required to be performed during the recreation season (May – October). For total suspended solids, ammonia (NH₃), E. Coli and CBOD₅, the City is required to set up a rotating schedule to sample at least five (5) stations each month. For each of the five stations, a sample is collected and the data reported for the day when the discharge from the station was sampled. Sampling for these parameters is required during normal working hours.

The following is the results from the monitoring at CSO discharge points from 2020.

Table 3. 2020 CSO Monitoring Data

Location	Outfall #	Date	TSS (mg/L)	CBOD5 (mg/L)	Ammonia (mg/L)	E Coli.
R03	3PF00000046	5/28/2020	140	26.5	0.408	326,000
R06	3PF00000049	8/28/2020	78	17.3	0.301	94,400
R11	3PF00000054	6/22/2020	105	8.58	0.4	461,000
R26	3PF00000069	6/22/2020	95	33	6.23	231,000
R26	3PF00000069	10/29/2020	33	14.8	0.33	147,000
R32	3PF00000075	8/28/2020	52	NA	0.62	291,000
R33	3PF00000076	6/22/2020	100	25	0.43	2,490,000
R33	3PF00000076	8/26/2020	137	32.3	4.23	1,630,000
R33	3PF00000076	10/19/2020	119	65	2.7	1,730,000
R40	3PF00000083	10/29/2020	52	18.8	2.02	413,000

Public Access Areas

(5) A description of any public access areas potentially impacted by each CSO discharge;

There are currently no public access areas that are impacted by CSO discharges.

Representative Precipitation Data

(6) Representative precipitation data in total inches to the nearest 0.1 inch that resulted in a CSO discharge, if precipitation was the cause of the discharge identified in (§ 122.38(b)(2));

Precipitation data collected at the 13 City owned rain gauges is included in Appendix A.

Permittee Contact Information

(7) Permittee contact information, if not listed elsewhere on the website where this annual notice is provided; and

Permittee contact information is included on the CSO Notification Web page (<http://www.akronwaterwaysrenewed.com/cso.aspx>) and elsewhere on the Akron Waterways Renewed (AWR!) website.

Nine Minimum Controls Implementation

(8) A concise summary of implementation of the nine minimum controls and the status of implementation of the long-term CSO control plan (or other plans to reduce or prevent CSO discharges), including:

The U.S. Environmental Protection Agency's (US EPA) Combined Sewer Overflow (CSO) Control Policy identifies nine minimum controls (NMC) that must be implemented to reduce CSO discharges and their effect on receiving waters.

NMC #1 – Provide Proper Operation and Maintenance for the Collection System and Combined Sewer Overflow Points

On a daily basis, the City inspects and cleans if necessary, static combined sewer overflow racks (bar screens), or regulating structures, in efforts to minimize the potential for dry weather overflow events from occurring. The CSO racks are remotely monitored via a Supervisory Control and Data Acquisition (SCADA) system that alerts the Water Reclamation Facility operator of a possible dry weather overflow event that may require immediate investigation.

In addition, the City inspects and cleans, if necessary, the sanitary and combined sewer system on a 5-year frequency. Specific segments are inspected and cleaned more often as a result of roots, fats, oils, and grease, or other operational defects.

NMC #2 – Provide Maximum Use of the Collection System for Storage of Wet Weather Flow Prior to Allowing Overflows

The City operates and maintains six (6) CSO storage basins throughout the collection system that have the ability to store approximately 26.8 MG. Future facilities to be placed in service include one (1) CSO storage basin (4.5MG) and two (2) storage and conveyance tunnels (48.6 MG).

In addition, the City is designing a real-time control decision support system to optimize the available capacity in the collection system during wet-weather events.

NMC #3 - Review and Modify the Pretreatment Program to Minimize the Impact of Non-Domestic Discharges from CSOs

The City of Akron implements an aggressive goal-oriented pretreatment program which has received commendation from the OEPA. The program undertakes the following measures to ensure continued compliance:

- Develop and initiate Pollution Prevention Programs with tributary industries
- Conduct industrial workshops
- Develop a work plan for integrated data management system for tracking pretreatment program activities
- Formalize spill response requirements with tributary industries
- Continuous updates to the City's industrial database, identifying major pollutant contributors upstream of overflows
- Establish and maintain a database of priority industries in terms of type of discharge, specifically hazardous or deleterious contaminants upstream of overflows
- Regular monitoring of the discharge of industries with particular emphasis on priority industries
- Ongoing enforcement of discharge reduction programs

NMC #4 - Maximize Flow to the Publically Owned Treatment Works (POTW) for Treatment

The City inspects and cleans, if necessary, the sanitary and combined sewer system on a 5-year frequency. Specific segments are inspected and cleaned more often as a result of roots, fats, oils, and grease, or other operational defects.

In addition, the City is designing a real-time control decision support system to optimize the available capacity in the collection system during wet-weather events.

NMC #5 - Prohibit CSO Discharges During Dry Weather

On a daily basis, the City inspects and cleans if necessary, static combined sewer overflow racks (bar screens), or regulating structures, in efforts to minimize the potential for dry weather overflow events from occurring. The CSO racks are remotely monitored via a Supervisory Control and Data Acquisition (SCADA) system that alerts the Water Reclamation Facility operator of a possible dry weather overflow event that may require immediate investigation.

NMC #6 - Control Solid and Floatable Materials in CSO Discharges

Floatable material and solids control exist at the majority of the CSO storage basins with the use of mechanically-raked bar screens. This screening allows the majority of the floatables and solids to stay in the sewer system to be transported and removed at the Water Reclamation Facility.

NMC #7 – Conduct Required Inspection, Monitoring and Reporting of CSOs

On a daily basis, the City inspects and cleans if necessary, static combined sewer overflow racks (bar screens), or regulating structures, in efforts to minimize the potential for dry weather overflow events from occurring. The CSO racks are remotely monitored via a Supervisory Control and Data Acquisition (SCADA) system that alerts the Water Reclamation Facility operator of a possible dry weather overflow event that may require immediate investigation.

NMC #8 – Implement Pollution Prevention Programs that Focus on Reducing the Level of Contaminants in CSOs

As described in NMC #3, the City has established measures for pollution prevention at its regulated industries.

In addition, in 2013, a Fats, Oils, and Grease (FOG) control program was established to eliminate the discharge of FOG substances into the sewer system by Food Service Establishments (FSEs).

NMC #9 – Implement a Public Notification Program for Areas Affected by CSOs

The City developed a Combined Sewer Overflow Notification Plan (the “Plan”) to comply with the requirements of 40 C.F.R. § 122.38. This regulation requires that a permittee authorized to discharge combined sewer overflows (“CSOs”) to the Great Lakes Basin must provide public notification, as described within the rule, as well as develop a notification plan.

As part of its Plan, the City of Akron created a CSO Notification Web Page, which can be found at www.akronwaterwaysrenewed.com/cso.aspx, that the public can visit 24-hours

per day to learn if a CSO discharge(s) is occurring, or has occurred in the past. The Web Page will display the initial notification as soon as possible, but no later than four (4) hours after the City becomes aware that a CSO discharge has occurred. Shortly after the end of the day in which CSO discharges have occurred, the Web Page will display supplemental information that includes the measured or estimated volume of discharge(s) and the approximate time(s) the discharge(s) ended.

Long-term CSO Control Plan Implementation

- i. *A description of key milestones remaining to complete implementation of the plan; and*

A summary of the key milestones remaining to complete implementation of the LTCP is contained in the following table. A complete report on the status of implementation of the long-term CSO control plan is included in the “City of Akron Consent Decree Semi-Annual Report No. 22” in Appendix B.

- ii. *A description of the average annual number of CSO discharges anticipated after implementation of the long-term control plan (or other plan relevant to reduction of CSO overflows) is completed.*

After implementation of the long-term control plan, the performance criteria for all CSO Control Measures is to have zero untreated combined sewer overflows in the typical year, as defined by the Consent Decree.

Status of Implementation of the Long-Term Control Plan

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
Rack 3	Green infrastructure plus optimized conveyance	<p>Bidding of Control Measure – June 30, 2018.</p> <p>Achievement of Full Operation – November 30, 2020.</p>	<p>The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with Green infrastructure plus optimized conveyance.</p> <p>Kelly Conveyance (CSO Rack 3) Notice to Proceed was issued on December 5, 2019. Achievement of Full Operation occurred on November 9, 2020.</p> <p>Chittenden Green Project (CSO Rack 3) Notice to Proceed was issued on May 7, 2019. Achievement of Full Operation occurred on May 5, 2020.</p> <p>Duane Green Project (CSO Rack 3) Notice to Proceed was issued on January 14, 2020. Achievement of Full Operation occurred on November 25, 2020.</p> <p>Work continues on remaining punch list items.</p>

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
Rack 3	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than August 30, 2020	The City submitted the required GI O&M Plan on August 26, 2020. U.S. EPA provided the City of Akron with written comments to the GI O&M Plan on November 18, 2020 and the parties discussed U.S. EPA's comments on November 19, 2020. The City of Akron then revised the GI O&M Plan to address U.S. EPA's comments, and provided the revised version to U.S. EPA on December 10, 2020. On December 17, 2020, U.S. EPA informed the City of Akron that the revised plan was acceptable. The City will formally submit the revised O&M Plan.
Rack 5 and 7	Green Infrastructure and Sewer Separation (Per Exhibit 3)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Construction Notice to Proceed was issued on June 21, 2016. Achievement of Full Operation occurred on October 26, 2017. Sub-final punch list is complete.
Racks 10 and 11	Storage Basin(s)	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – December 31, 2020.	The Court entered the Second Amendment to the Consent Decree December 17, 2019 which increased the size of the storage basin from 2.5 to 4.5 MG. Construction Notice to Proceed was issued on September 24, 2018. Achievement of Full Operation occurred on July 23, 2020. Remaining punch list work continues.
Rack 12	Storage Basin(s)	Bidding of Control Measure – November 30, 2014. Achievement of Full Operation – October 31, 2017.	Construction Notice to Proceed was issued on May 29, 2015. Achievement of Full Operation occurred on October 30, 2017. Work continues on remaining punch list items.
Rack 14	Storage Basin(s)	Bidding of Control Measure – October 31, 2014. Achievement of Full Operation – April 30, 2017.	Project complete. Achievement of Full Operation occurred on January 3, 2017.
Rack 15	Storage Basin(s)	Bidding of Control Measure – November 30, 2013. Achievement of Full Operation – October 31, 2015.	Project complete. Project placed in service on October 30, 2015. Achievement of Full Operation occurred on February 17, 2016.

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
Rack 22	Storage Basin(s)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – December 31, 2017.	Project complete. Achievement of Full Operation occurred on November 29, 2017. Construction is complete.
Rack 26 and 28	Green infrastructure plus optimized conveyance	Bidding of Control Measure – October 31, 2021. Achievement of Full Operation – December 31, 2022.	The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with Green infrastructure plus optimized conveyance. Construction was completed for one aspect of the IP alternative, called Aqueduct Green Street Improvements. The Rack 26 work is being designed in house, with subconsultant design of the Rack structure and foundation, including hydraulic modeling, with two primary alternatives under consideration to minimize work in Hickory. The Rack 28 work is proceeding as design build as a change order to the Uhler project to coordinate with other work on Memorial Parkway.
Rack 26 and 28	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than March 1, 2019	U.S. EPA issued an approval of the City's O&M Plan on October 23, 2019. GI performance reporting is provided in Appendix H.
Rack 27	Optimized conveyance	Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with optimized conveyance. The notice to proceed was issued on November 5, 2018. Achievement of Full Operation occurred on December 21, 2019. Final site work and punch list work is ongoing.
Rack 29	Optimized conveyance	Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	See Row 9 above for project update.

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
Rack 36	Green Infrastructure and Sewer Separation (Per Exhibit 3)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Project is in the warranty period. Achievement of Full Operation occurred on October 30, 2017. Construction was substantially complete as of September 15, 2017. Final punch list work is completed.
Racks 4, 16, 17, 18, 19, 20, 23, 24, 37	Ohio Canal Tunnel – Construct a 28-foot internal diameter tunnel, 5,500 feet in length, or any other combination of diameter and length that achieves the design criteria.	Bidding of Control Measure – April 30, 2014. Achievement of Full Operation – December 31, 2018.	Notice to Proceed was issued on November 6, 2015. On September 21, 2017, the City submitted a notification that the City has reason to believe that the Ohio Canal Interceptor Tunnel (OCIT) project will not meet the Achievement of Full Operation deadline. The City submitted an amendment to this notification on October 17, 2017. The parties then participated in a conference call on November 29, 2017 and further discussed the status of the schedule of the project. The parties agreed that the City would submit periodic updates on the status of the schedule of the project. The City continued to provide U.S. EPA and Ohio EPA with updated during this reporting period. The OCIT was placed into operation in stages. The racks controlled by the OCIT were tied into, and then controlled by, the OCIT beginning on March 3, 2020. As of May 29, 2020, over 90% of the flow from the racks was tied into and being controlled by the OCIT. The remaining racks were tied into the OCIT as of June 13, 2020. See table 2-3 below for the tie in dates of the racks and the associated percentage of total flow. Achievement of Full Operation occurred on June 29, 2020 with the submission of O&M Plans. Site work is being completed.
Racks 16, 17, 18, 19, 20, 23, 24	Ohio Canal Tunnel – ACTIVFLO™ Ballasted Flocculation Unit or equivalent technology that meets the Design and Performance Criteria and Disinfection.	Bidding of Control Measure – April 30, 2024. Achievement of Full Operation – October 31, 2027.	LTCP optimization was performed as part of the Integrated Plan in 2015. No advanced facilities planning or design activities were undertaken during the reporting period. The City updated the model to account for the actual OCIT configuration and engaged in flow monitoring activities to recalibrate the model. The parties engaged in multiple discussions regarding the reduced overflow volume at the OCIT and whether or not it is cost effective to treat the remaining overflows.

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
Racks 32, 33, 34, 35	Northside Interceptor Tunnel – Construct a 20-foot internal diameter tunnel, 10,000 feet in length or any other combination of diameter and length that achieves the design criteria.	Bidding of Control Measure – April 30, 2023. Achievement of Full Operation – December 31, 2026.	The City executed a contract to further planning activities for the Integrated Plan project. Activities completed during this period include flow, groundwater and rainfall monitoring; modeling, soil borings, survey, private property I/I evaluations, coordination with utilities and stakeholders, constructability reviews, public outreach, and initial evaluation of alternatives. Most of the field work for the foregoing was completed during this reporting period and the City began to update and recalibrate the model for the NSI drainage basin. The parties engaged in several calls to discuss the City's plans to replace the NSIT with the Integrated Plan project.
WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by implementing step feed operation in Train 6, as described in Paragraph 10.A of the Consent Decree.	Bidding of Control Measure – October 31, 2011. Achievement of Full Operation – October 15, 2013.	Project complete (see Section 1.A of this Semi-Annual Report).
WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by performing the upgrades identified in the Consent Decree in Section V.10.C.	Bidding of Control Measure – January 15, 2016. Achievement of Full Operation – October 15, 2017.	Since the Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 have achieved 30 MGD of wet weather treatment capacity, this Consent Decree item is not required.
WPCS Phase 1 BioACTIFLO™ Wet Weather Treatment Pilot Study (the "Pilot Study")	Conduct the Pilot Study in accordance with Exhibit 1 to this Long Term Control Plan Update.	Pilot Study Start Date – May 1, 2012. Pilot Study Completion Date – November 30, 2013. Pilot Study Report submitted to EPA by December 31, 2013.	Study is complete. USEPA issued a concurrence letter on April 8, 2015.
WPCS Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to 170 MGD.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 1 per US EPA approval of Alternate Plan A on February 11, 2016.
WPCS Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to treat all flow that does not receive conventional secondary treatment. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 2 per US EPA approval of Alternate Plan A on February 11, 2016.

Control Measure Location	Description	Critical Milestones	Progress During Reporting Period
WPCS Alternative Plan A – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan A approved by USEPA.	Bidding of Control Measure –April 30, 2017. Achievement of Full Operation – April 30, 2019.	USEPA issued an approval of Alternative Plan A on February 11, 2016 to upgrade conventional secondary treatment capacity to 220 MGD. The construction Notice to Proceed was issued on August 24, 2016. Construction is complete. Achievement of Full Operation occurred on April 30, 2019. The sequence of the WPCS Alternative A Phase 2, Part 1(Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report.
WPCS Alternative Plan A – Phase 2 – Part 2*	Install – BioCEPT to achieve a minimum capacity of 60 MGD. In addition, all flows receiving BioCEPT shall receive disinfection during the recreation season.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	BioCEPT is to achieve a minimum sustained capacity of 60 MGD. The Notice to Proceed was issued to the Contractor on May 31, 2019. Construction is ongoing. The sequence of the WPCS Alternative A Phase 2, Part 1 (Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report. The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the BioACTIFLO facility with a BioCEPT facility and an additional demonstration study. The replacement project was approved by USEPA and Ohio EPA, see Section 2.A.2.
WPCS Alternative Plan B – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan B approved by USEPA.	Bidding of Control Measure –December 31, 2019. Achievement of Full Operation – December 31, 2021.	Not Applicable
WPCS Alternative Plan B – Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to achieve the minimum capacity specified in Alternative Plan B approved by USEPA. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure –April 30, 2017. Achievement of Full Operation – April 30, 2019.	Not Applicable

Appendix A

CSO Occurrences, Overflow Volumes and
Precipitation Data 2020

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	1/3/2020		1/4/2020		1/10/2020		1/11/2020		1/12/2020		1/15/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0	0	0	0	0	0	0.65	0.018	0.68	0.1045	0.23	0.0174
047/R04	Mill St.	0	0	0	0	0.93	0.0263	0.61	0.0245	0.63	0.0395	0.09	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0.76	0.3361	0.26	0.0611	0.19	0.0306
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0.82	0	0.69	0.0305	2.04	1.0224	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0.13	0.003	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0.08	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0.91	0.0074	0	0	3.19	0.0445	1.9	0.1205	1.31	0.1645	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	3.49	0.0068	0	0	6.69	0.0141	1.22	0.0052	2.3	0.0068	0	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	3.75	0.021	0.3	0.0021	3.7	0.0111	0.6	0.0008	1.02	0.014	0.29	0.002
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	0	0	0.22	0	0.52	0.0315	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.39	3.25	0.14	1.17	0.71	5.75	0.33	2.33	0.12	0.58	0.10	0.33
G2	1532 Peckham St.	0.38	3.17	0.13	1.08	0.61	5.00	0.35	2.42	0.13	0.75	0.05	0.33
G3	1668 Merriman Rd.	0.39	3.25	0.15	1.25	0.56	4.58	0.32	2.42	0.07	0.42	0.10	0.50
G4	1200 Firestone Pkwy.	0.38	3.17	0.12	1.00	0.65	5.33	0.31	2.00	0.12	0.42	0.10	0.42
G5	177 S. Broadway St.	0.38	3.17	0.15	1.25	0.65	5.33	0.31	2.33	0.16	0.58	0.08	0.50
G6	574 E. Cuyahoga Falls Ave.	0.35	2.92	0.15	1.25	0.45	3.75	0.25	1.83	0.15	0.42	0.05	0.42
G7	1436 Triplett Blvd.	0.40	3.33	0.17	1.42	0.52	4.33	0.21	1.75	0.05	0.33	0.06	0.33
G8	2100 Eastwood Ave.	0.39	3.17	0.15	1.25	0.61	4.92	0.28	2.08	0.14	0.58	0.10	0.42
G9	3487 S. Smith Rd.	0.40	3.33	0.17	1.42	0.58	4.58	0.28	2.17	0.04	0.33	0.13	0.50
G10	3061 Albrecht Ave.	0.38	3.17	0.16	1.33	0.61	5.00	0.25	1.92	0.12	0.33	0.09	0.42
G11	89 E. Howe Rd.	0.40	3.25	0.14	1.17	0.56	4.67	0.27	2.08	0.16	0.58	0.08	0.42
G12	1100 Graham Circle	0.36	3.00	0.15	1.25	0.57	4.50	0.27	1.92	0.08	0.50	0.12	0.50
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

	Date:	1/18/2020		1/22/2020		1/24/2020		1/25/2020		2/2/2020		2/4/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0	0	0	0	1.2	0.0399	0	0	0	0	0.88	0.015
047/R04	Mill St.	3.58	0.0696	0	0	2.58	0.094	0	0	0	0	1.27	0.0414
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0.54	0.0356	0	0	1.81	0.499	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0.13	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0.19	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0.99	0.0153
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	5.69	0.3527	0	0	0	0	2.17	0.1452
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	9.47	0.0645	7.5	0.7717	0	0	0	0	0	0	2.26	0.0073
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	9.41	0.13	0	0	6.86	0.051	0.06	0	7.5	0.0287	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	0.41	0.0042	0	0	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.74	4.08	0.00	0.00	0.75	5.83	0.12	1.00	0.00	0.00	0.34	2.50
G2	1532 Peckham St.	0.73	5.25	0.00	0.00	0.65	5.08	0.08	0.67	0.00	0.00	0.29	2.33
G3	1668 Merriman Rd.	0.76	4.33	0.01	0.08	0.65	5.08	0.11	0.92	0.01	0.08	0.31	2.50
G4	1200 Firestone Pkwy.	0.60	4.50	0.00	0.00	0.61	4.67	0.06	0.50	0.00	0.00	0.27	2.25
G5	177 S. Broadway St.	0.77	5.00	0.00	0.00	0.59	4.58	0.10	0.83	0.00	0.00	0.32	2.42
G6	574 E. Cuyahoga Falls Ave.	0.62	2.92	0.00	0.00	0.47	3.75	0.10	0.83	0.00	0.00	0.28	2.33
G7	1436 Triplett Blvd.	0.57	4.42	0.00	0.00	0.56	4.42	0.10	0.83	0.01	0.08	0.31	2.42
G8	2100 Eastwood Ave.	0.66	4.50	0.00	0.00	0.66	5.08	0.13	1.08	0.02	0.17	0.31	2.42
G9	3487 S. Smith Rd.	0.73	4.92	0.00	0.00	0.66	5.17	0.08	0.67				
G10	3061 Albrecht Ave.	0.53	4.17	0.01	0.08	0.60	4.83	0.10	0.83	0.01	0.08	0.27	2.17
G11	89 E. Howe Rd.	0.24	1.17	0.00	0.00	0.61	4.83	0.11	0.92	0.06	0.50	0.25	2.00
G12	1100 Graham Circle	0.68	5.08	0.00	0.00	0.54	4.42	0.09	0.75	0.06	0.50	0.26	2.17
G13	10 Ascot Pkwy.												

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	2/5/2020		2/15/2020		2/18/2020		2/24/2020		2/25/2020		2/26/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0.74	0.0131	0	0	0	0	0.36	0	0	0	0	0
047/R04	Mill St.	1.12	0.0357	0	0	0.53	0.0188	0.5	0.0226	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	1.1	0.4364	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	2.16	0.1675	0	0	2.26	0.1082	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0	0	0	0	0	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	2.45	0.012	4.38	0	0	0	0.67	0.0005	0.8	0	0.76	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0.12	0.0693	0.3	0.0061	0	0	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.14	1.00	0.00	0.00	0.27	2.17	0.25	2.00	0.16	1.33	0.24	2.00
G2	1532 Peckham St.	0.15	1.08	0.00	0.00	0.31	2.50	0.23	1.75	0.15	1.25	0.20	1.67
G3	1668 Merriman Rd.	0.18	1.25	0.01	0.08	0.39	3.17	0.20	1.58	0.14	1.17	0.21	1.75
G4	1200 Firestone Pkwy.	0.04	0.33	0.00	0.00	0.12	0.92	0.12	1.00	0.07	0.58	0.12	1.00
G5	177 S. Broadway St.	0.14	1.00	0.00	0.00	0.30	2.42	0.22	1.75	0.17	1.42	0.20	1.67
G6	574 E. Cuyahoga Falls Ave.	0.14	1.00	0.01	0.08	0.29	2.42	0.20	1.58	0.17	1.42	0.20	1.67
G7	1436 Triplett Blvd.	0.01	0.08	0.00	0.00	0.20	1.67	0.21	1.75	0.22	1.83	0.21	1.75
G8	2100 Eastwood Ave.	0.15	1.25	0.02	0.17	0.26	2.08	0.19	1.58	0.21	1.75	0.20	1.67
G9	3487 S. Smith Rd.			0.00	0.00	0.39	3.17	0.16	1.33	0.12	1.00	0.19	1.58
G10	3061 Albrecht Ave.	0.16	1.33	0.00	0.00	0.20	1.67	0.19	1.50	0.22	1.83	0.19	1.58
G11	89 E. Howe Rd.	0.14	1.08	0.04	0.33	0.31	2.58	0.21	1.75	0.18	1.50	0.21	1.75
G12	1100 Graham Circle	0.14	1.17	0.00	0.00	0.38	3.08	0.21	1.67	0.14	1.17	0.21	1.75
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	3/3/2020		3/4/2020		3/10/2020		3/13/2020		3/18/2020		3/19/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	1.21	0.1437	0	0	0.16	0	2	0.3744	0	0	1.94	0.1306
047/R04	Mill St.	1.86	0.1448	0	0	0.46	0.0169	2.08	0.2163	6.04	0.6376	0.83	0.0357
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0.26	0	0	0	0	0	1.75	0.1459	4.61	0.6397	0	0
060/R17	Exchange St.	0.11	0	0	0	0.11	0	0.59	0.0251	2.41	0.1034	0.27	0
061/R18	Willow Run Trunk	2.22	1.3886	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0.77	0.0489	2.38	0.5528	6.82	1.7724	2.45	0.0785
069/R26	Aqueduct St outlet E. of Hickory St.	0.51	0.0123	0	0	0	0	0.72	0.014	3.28	0.11	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.41	0.0132	0	0	0	0	1.05	0.022	4.18	0.1453	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	1.1	0.0015	0	0	2.13	0.001	2.86	0.0203	6.69	0.0744	23.4	0.0048
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0.4	0.0018	0	0	0	0	0.64	0.002	2.4	0.0018	4	0.003
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	1.29	0.0462	0.2	0.0018	0	0	1.97	0.1365	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	1.3	3.3807	0.7	0.2099
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.37	2.00	0.04	0.33	0.25	1.92	0.53	1.92	1.32	6.25	0.29	2.00
G2	1532 Peckham St.	0.42	1.83	0.04	0.33	0.27	2.08	0.47	2.00	1.24	6.17	0.28	2.33
G3	1668 Merriman Rd.	0.48	2.17	0.05	0.42	0.28	2.17	0.43	1.92	1.25	6.25	0.19	1.58
G4	1200 Firestone Pkwy.	0.27	1.83	0.03	0.25	0.23	1.92	0.41	1.92	0.93	5.17	0.29	2.08
G5	177 S. Broadway St.	0.45	2.17	0.04	0.33	0.28	2.25	0.44	2.17	1.21	6.08	0.32	2.33
G6	574 E. Cuyahoga Falls Ave.	0.44	2.08	0.04	0.33	0.25	2.00	0.43	2.00	1.19	6.08	0.24	2.00
G7	1436 Triplett Blvd.	0.32	1.58	0.04	0.33	0.17	1.42	0.39	1.92	1.33	6.25	0.28	1.83
G8	2100 Eastwood Ave.	0.34	2.00	0.04	0.33	0.30	2.33	0.47	2.17	1.22	6.17	0.28	2.00
G9	3487 S. Smith Rd.	0.41	2.25	0.04	0.33	0.27	2.08	0.40	1.75	1.27	6.08	0.17	1.25
G10	3061 Albrecht Ave.	0.27	1.42	0.05	0.42	0.23	1.92	0.40	1.92	1.30	6.50	0.29	2.42
G11	89 E. Howe Rd.	0.48	2.33	0.04	0.33	0.29	2.33	0.45	2.17	1.22	6.00	0.28	2.33
G12	1100 Graham Circle	0.37	1.83	0.05	0.42	0.25	2.08	0.42	2.00	1.14	5.92	0.17	1.42
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	3/20/2020		3/22/2020		3/23/2020		3/26/2020		3/27/2020		3/28/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0.2	0.0066	0	0	0	0	0	0	0	0	0.3	0.1009
047/R04	Mill St.	1	0.0734	0	0	0	0	0.1	0	0.37	0.032	5.78	0.7919
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	10.97	0.3272
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0.22	0	0	0	0	0	0	0	0	0	4.01	1.2122
060/R17	Exchange St.	0.18	0.0157	0	0	0	0	0	0	0.11	0	2.07	0.6455
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0.67	0.013
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0.49	0.0046
067/R24	West Market St Outlet @ Ravine St.	1.46	0.1838	0.3	0	0.34	0.0059	0.24	0	0	0	20.17	3.6796
069/R26	Aqueduct St outlet E. of Hickory St.	0.16	0.0016	0	0	0	0	0	0	0	0	3.34	0.2997
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.33	0.0029	0	0	0	0	0	0	0	0	4.36	0.1248
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	13.3	0.0227	0.72	0	1.4	0.0017	0	0	0	0	0.5	0.001
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0	0	0	0	1.6	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	0	0	0	0	0	0	1.6	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	8.1	5.2248
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.37	1.83	0.12	1.00	0.15	1.17	0.11	0.92	0.22	1.25	1.74	4.75
G2	1532 Peckham St.	0.30	1.75	0.11	0.92	0.10	0.83	0.13	1.08	0.13	0.75	1.55	5.25
G3	1668 Merriman Rd.	0.20	1.08	0.09	0.75	0.12	0.92	0.13	1.00	0.10	0.75	1.84	5.92
G4	1200 Firestone Pkwy.	0.34	1.67	0.10	0.75	0.12	1.00	0.11	0.92	0.13	0.75	1.42	4.42
G5	177 S. Broadway St.	0.34	1.67	0.10	0.75	0.13	1.08	0.17	1.08	0.10	0.67	1.65	5.58
G6	574 E. Cuyahoga Falls Ave.	0.23	1.33	0.08	0.67	0.12	1.00	0.18	1.25	0.09	0.67	1.64	5.67
G7	1436 Triplett Blvd.	0.45	2.00	0.09	0.67	0.09	0.75	0.12	1.00	0.13	0.83	1.53	4.75
G8	2100 Eastwood Ave.	0.34	1.92	0.09	0.75	0.16	1.25	0.12	1.00	0.08	0.58	1.63	5.58
G9	3487 S. Smith Rd.	0.18	1.08	0.09	0.75	0.17	1.17	0.12	1.00	0.12	0.75	1.82	5.92
G10	3061 Albrecht Ave.	0.25	2.08	0.17	1.33	0.08	0.67	0.11	0.92	0.08	0.58	1.17	7.25
G11	89 E. Howe Rd.	0.26	1.50	0.11	0.92	0.14	1.17	0.14	1.00	0.08	0.67	1.76	5.83
G12	1100 Graham Circle	0.19	1.17	0.09	0.75	0.11	0.83	0.13	1.08	0.08	0.67	1.58	6.08
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	3/29/2020		3/30/2020		4/7/2020		4/8/2020		4/9/2020		4/10/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	1.88	0.3091	0	0	0.4	0.0199	2.91	0.8664	0	0	1.1	0.4195
047/R04	Mill St.	0.77	0.0752	0	0	0.79	0.0433	2.67	0.2727	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0.24	0.0764	3.11	2.1792	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	10.3	0.2022	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0.35	0.0112	0	0	0	0	2.56	0.3367	0	0	0	0
060/R17	Exchange St.	0.35	0.0063	0	0	0.11	0.0219	0.99	0.0282	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0.11	0.001	0.01	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	11.58	1.0299	0.75	0.0104	1.29	0.2401	3.97	1.0196	0.07	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.28	0.0041	0	0	0.15	0.0386	2.25	0.0517	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0	0	0	2.51	0.0866	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0.04	0	0.41	0.0042	0	0	0	0
076/R33	North Side Interceptor @ Main St.	1.7	0	3.13	0.0057	2.95	0.0109	4.52	0.0505	2.55	0.0042	0	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0.11	0	1.84	0.369	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	0	0	2.77	0.2962	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.21	1.00	0.06	0.50	0.16	1.17	0.74	2.58	0.08	0.67	0.19	1.17
G2	1532 Peckham St.	0.24	1.08	0.08	0.67	0.28	1.58	0.70	2.67	0.12	1.00	0.18	0.67
G3	1668 Merriman Rd.	0.26	1.00	0.11	0.83	0.40	1.83	0.73	2.58	0.22	1.58	0.10	0.83
G4	1200 Firestone Pkwy.	0.17	0.75	0.02	0.17	0.00	0.00	0.18	1.08	0.00	0.00	0.00	0.00
G5	177 S. Broadway St.	0.23	1.00	0.09	0.75	0.24	1.58	0.71	2.67	0.12	1.00	0.17	1.17
G6	574 E. Cuyahoga Falls Ave.	0.23	1.17	0.10	0.83	0.29	1.92	0.71	2.42	0.22	1.17	0.11	0.92
G7	1436 Triplett Blvd.	0.26	1.00	0.09	0.67	0.19	1.25	0.82	2.75	0.08	0.67	0.11	0.83
G8	2100 Eastwood Ave.	0.27	0.83	0.09	0.75	0.24	1.67	0.71	2.67	0.12	1.00	0.10	0.83
G9	3487 S. Smith Rd.	0.37	1.08	0.10	0.67	0.39	1.75	0.58	2.58	0.26	1.83	0.16	1.08
G10	3061 Albrecht Ave.	0.03	0.25	0.01	0.08	0.21	1.75	0.22	1.83	0.04	0.33	0.03	0.25
G11	89 E. Howe Rd.	0.32	1.08	0.13	1.08	0.22	1.50	0.63	2.58	0.18	1.33	0.05	0.42
G12	1100 Graham Circle	0.29	1.17	0.09	0.75	0.35	1.67	0.64	2.50	0.22	1.50	0.03	0.25
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	4/13/2020		4/15/2020		4/17/2020		4/23/2020		4/26/2020		4/29/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	1.3	0.4632	0	0	0	0	0.2	0.0036	3.8	0.0869	0	0
047/R04	Mill St.	1.36	0.0621	0	0	0	0	0	0	3.87	0.2107	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0.85	0.2139	0	0	0	0	0	0	1.79	0.5397	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0.82	0	0	0
060/R17	Exchange St.	0.05	0	0	0	0	0	0	0	0.15	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	3.44	0.246	0.05	0	0.73	0.0044	0	0	5.34	0.6432	0.3	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.2	0.0052	0	0	0	0	0	0	0.3	0.0032	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.29	0.0059	0	0	0	0	0	0	0.31	0.0029	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	0	0	0	0	0	0	0.36	0	7.28	0.0442	1.43	0.0026
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0.15	0.0008	0	0	0	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0.41	0.021	0	0	0	0	0	0	2.11	0.0735	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.42	2.92	0.12	0.83	0.44	3.67	0.18	1.42	0.85	6.00	0.15	1.25
G2	1532 Peckham St.	0.51	3.33	0.09	0.67	0.41	3.42	0.10	0.83	0.81	6.25	0.13	1.08
G3	1668 Merriman Rd.	0.54	3.42	0.10	0.75	0.46	3.75	0.08	0.67	0.85	6.00	0.14	1.17
G4	1200 Firestone Pkwy.	0.10	0.75	0.00	0.00	0.03	0.25	0.02	0.17	0.10	0.83	0.07	0.58
G5	177 S. Broadway St.	0.43	2.92	0.10	0.75	0.42	3.50	0.13	1.00	0.83	6.17	0.14	1.17
G6	574 E. Cuyahoga Falls Ave.	0.36	2.58	0.08	0.67	0.41	3.42	0.09	0.75	0.73	5.75	0.12	1.00
G7	1436 Triplett Blvd.	0.30	1.92	0.12	1.00	0.33	2.75	0.15	1.17	0.82	6.42	0.13	1.08
G8	2100 Eastwood Ave.	0.40	2.50	0.10	0.83	0.41	3.42	0.16	1.17	0.72	5.75	0.15	1.17
G9	3487 S. Smith Rd.	0.61	3.83	0.12	1.00	0.46	3.83	0.06	0.50	0.79	6.17	0.14	1.17
G10	3061 Albrecht Ave.	0.16	1.33	0.12	1.00	0.32	2.67	0.07	0.58	0.20	1.67	0.01	0.08
G11	89 E. Howe Rd.	0.48	3.00	0.07	0.58	0.45	3.75	0.13	1.08	0.81	5.83	0.15	1.25
G12	1100 Graham Circle	0.47	3.00	0.11	0.92	0.43	3.58	0.07	0.58	0.74	5.67	0.13	1.08
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	4/30/2020		5/2/2020		5/3/2020		5/10/2020		5/11/2020		5/14/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0.24	0.0087	0	0	0	0	0.39	0.0522	0	0	1.29	0.2612
047/R04	Mill St.	0	0	0.92	0.0621	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0.22	0.0204	1.12	1.2984	0	0	0.31	0.1018	0	0	0.79	0.499
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0.07	0	0.19	0	0.48	0.0449	0	0	0.97	0.1796
060/R17	Exchange St.	0	0	0.17	0.0125	0	0	0	0	0	0	0.1	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0.25	0.014	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0.25	0.0127	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	1.22	0.6372	0	0	0.76	0.0993	0.57	0.0059	2.26	0.5024
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0.78	0.2044	0	0	0	0	0	0	0.48	0.0205
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0.66	0.0484	0	0	0.11	0	0	0	0.61	0.025
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0.1	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	0	0	1.03	0.0047	0	0	1.2	0.0036	0	0	2.1	0.0067
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0.13	0	0	0	0	0	0	0	0.29	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0.71	0.0609	0	0	0.41	0.0189	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.15	1.25	0.01	0.08	0.01	0.08	0.21	1.00	0.12	0.92	0.55	1.58
G2	1532 Peckham St.	0.18	1.17	0.10	0.58	0.00	0.00	0.21	1.00	0.13	1.08	0.55	1.92
G3	1668 Merriman Rd.	0.15	1.00	0.14	0.50	0.00	0.00	0.24	1.08	0.12	0.92	0.38	1.67
G4	1200 Firestone Pkwy.	0.03	0.25	0.00	0.00	0.00	0.00	0.06	0.42	0.02	0.17	0.10	0.50
G5	177 S. Broadway St.	0.16	1.17	0.28	0.75	0.00	0.00	0.20	0.92	0.16	1.33	0.49	1.67
G6	574 E. Cuyahoga Falls Ave.	0.12	1.00	0.26	0.58	0.00	0.00	0.18	1.00	0.09	0.75	0.40	1.58
G7	1436 Triplett Blvd.	0.18	1.25	0.03	0.08	0.00	0.00	0.16	1.00	0.12	1.00	0.51	1.50
G8	2100 Eastwood Ave.	0.18	1.00	0.77	0.67	0.01	0.08	0.17	1.00	0.15	1.08	0.37	1.58
G9	3487 S. Smith Rd.	0.10	0.83	0.20	0.58	0.00	0.00	0.31	1.42	0.15	1.25	0.38	1.50
G10	3061 Albrecht Ave.	0.03	0.25	0.05	0.42	0.01	0.08	0.04	0.33	0.08	0.67	0.43	1.33
G11	89 E. Howe Rd.	0.18	1.25	0.19	0.25	0.00	0.00	0.17	1.00	0.12	1.00	0.50	1.67
G12	1100 Graham Circle	0.15	1.25	0.04	0.25	0.00	0.00	0.21	1.17	0.13	1.00	0.33	1.58
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	5/15/2020		5/18/2020		5/19/2020		5/22/2020		5/25/2020		5/28/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0.1	0.0055	2.16	0.3483	0.72	0.0131	0.8	0.1021	0.39	0.1088	1.9	0.3758
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0.48	0.0088	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	1.57	1.4664	1.06	0.4073	0	0	0.53	0.1935	0.45	0.1884	1	0.4277
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	1.51	0.7744	3.29	0.4602	0.4	0.0105	1.06	0.0673	1.12	0.5836	1.88	0.3816
060/R17	Exchange St.	0.5	0.0815	0.18	0.0094	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	1.86	0.8388	4.75	0.6639	1.69	0.0504	2.38	0.1912	1.01	0.5246	1.76	0.2015
069/R26	Aqueduct St outlet E. of Hickory St.	0.96	0.1026	0.8	0.0296	1.1	0.0363	0	0	0.52	0.1798	0.12	0.0361
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.87	0.0382	0.98	0.0426	0	0	0	0	0.58	0.0455	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0.31	0.0462	0	0
076/R33	North Side Interceptor @ Main St.	0.6	0.1604	8.18	0.0427	5.05	0.0208	3.6	0.0027	1	0.105	1.9	0.0029
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0.65	0.003	0.12	0	0	0	0	0	0.22	0.001	0.22	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	1.18	0.126	1.1	0.0308	0	0	0.66	0.0483	0.72	0.0651	1.37	0.084
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.07	0.58	0.00	0.00	0.00	0.00	0.49	3.33	0.06	0.25	0.37	2.58
G2	1532 Peckham St.	0.53	1.75	1.02	5.17	0.29	2.33	0.48	3.25	0.00	0.00	0.30	2.33
G3	1668 Merriman Rd.	0.48	1.42	0.98	5.00	0.28	2.25	0.39	2.58	0.20	0.33	0.33	2.42
G4	1200 Firestone Pkwy.	0.31	0.83	0.07	0.42	0.18	1.42	0.00	0.00	0.02	0.08	0.01	0.08
G5	177 S. Broadway St.	0.66	2.17	1.02	5.08	0.27	2.08	0.38	2.67	0.47	0.58	0.70	2.92
G6	574 E. Cuyahoga Falls Ave.	0.62	1.50	0.74	4.83	0.24	1.92	0.34	2.33	0.40	0.58	0.49	2.58
G7	1436 Triplett Blvd.	0.60	1.92	0.83	4.58	0.25	1.92	0.38	2.50	0.03	0.25	0.44	2.50
G8	2100 Eastwood Ave.	0.78	2.17	0.66	4.75	0.25	1.92	0.32	2.08	0.04	0.33	0.40	2.33
G9	3487 S. Smith Rd.	0.45	1.50	1.31	5.83	0.34	2.58	0.46	3.17	0.00	0.00	0.28	2.08
G10	3061 Albrecht Ave.	0.55	1.75	0.66	4.42	0.23	1.92	0.27	2.00	0.10	0.42	0.39	2.50
G11	89 E. Howe Rd.	0.58	1.83	0.75	4.67	0.23	1.75	0.34	2.42	0.03	0.25	0.39	2.25
G12	1100 Graham Circle	0.54	1.92	0.80	5.17	0.18	1.50	0.35	2.42	0.43	0.83	0.40	2.50
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	5/29/2020		6/4/2020		6/5/2020		6/9/2020		6/10/2020		6/18/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	1.62	0.2961	0.48	0.0166	0	0	0	0	0	0	0.44	0.1437
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0.61	1.1856	0	0	0.15	0.5264	0.34	1.2085
054/R11	Hazel St. – District 4	0.9	0.6568	0	0	1.52	2.2047	0	0	0.9	0.8554	0.51	0.5244
055/R12	Camp Brook Storage Basin	0	0	0	0	2.3	33.32	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0.5	0.2786	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0.25	0	0	0	0	0	0.21	0.0561	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	1	5.5187	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	2.71	0.735	0.71	0.0682	1.64	0.8669	0	0	1.26	0.778	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.46	0.1256	0	0	0.85	0.3112	0	0	0.67	0.1843	0.17	0.0034
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.46	0.0191	0	0	0.84	0.0514	0	0	0.68	0	0.09	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0.07	0	0	0	1.35	0.7999	0	0	0	0	0.23	0.0231
076/R33	North Side Interceptor @ Main St.	4.02	0.0161	0	0	4.77	0.1186	0	0	0	0	1.17	0.0099
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0.42	0.2097	0	0	0	0	0.07	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0.95	0.0588	0	0	3.05	0.6638	0	0	0.94	0.0609	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.94	2.00	0.29	1.83	0.00	0.00	0.00	0.00	0.71	1.00	0.02	0.17
G2	1532 Peckham St.	0.59	1.92	0.17	1.00	0.11	0.33	0.00	0.00	0.70	1.00	0.03	0.17
G3	1668 Merriman Rd.	0.44	2.17	0.26	1.42	0.41	0.58	0.00	0.00	0.63	0.92	0.05	0.17
G4	1200 Firestone Pkwy.	0.08	0.58	0.08	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G5	177 S. Broadway St.	0.73	1.92	0.20	1.25	0.56	0.67	0.00	0.00	0.54	0.92	0.17	0.33
G6	574 E. Cuyahoga Falls Ave.	0.53	1.83	0.14	0.92	1.77	0.83	0.00	0.00	0.67	1.00	0.29	0.25
G7	1436 Triplett Blvd.	0.46	1.58	0.47	2.00	0.05	0.33	0.00	0.00	0.64	0.83	0.22	0.50
G8	2100 Eastwood Ave.	0.49	1.75	0.22	1.58	1.11	0.83	0.00	0.00	0.68	0.83	0.08	0.33
G9	3487 S. Smith Rd.	0.43	2.33	0.24	1.33	0.01	0.08	0.00	0.00	0.57	0.92	0.03	0.25
G10	3061 Albrecht Ave.	1.16	2.08	0.68	2.17	0.07	0.50	0.00	0.00	0.83	1.08	0.78	0.25
G11	89 E. Howe Rd.	0.57	2.08	0.17	1.00	1.00	0.75	0.00	0.00	0.57	1.00	0.08	0.25
G12	1100 Graham Circle	0.41	1.92	0.18	1.17	0.32	0.42	0.00	0.00	0.86	1.08	0.02	0.17
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	6/19/2020		6/21/2020		6/22/2020		6/23/2020		6/27/2020		6/28/2020	
Overflows													
Station/Rack	Location	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.	Dur.	Vol.
046/R03	Kelly Ave.	0	0	0.73	0.0435	1.18	0.2917	0	0	0	0	0.6	0.1306
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0.36	0.4852	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0.36	0.0815	1.11	1.1049	0	0	0.35	0.1273	0.31	0.1273
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.06	0	0	0	1.63	0.1519	0	0	0.47	0.1489	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0	1.92	0.1057	0	0	0.65	0.0206	0.23	0.0088
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0.71	0.0315	0	0	0.33	0.0357	0	0
076/R33	North Side Interceptor @ Main St.	0	0	1.28	0.012	4.11	0.0442	0.46	0	2.85	0.0229	0	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0.64	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0.76	0.0315	1.52	0.1449	0	0	1.23	0.0882	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)												

Rain Gauge	Location	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.	Depth	Dur.
G1	2644 Cordelia Ave.	0.00	0.00	0.24	1.33	1.10	4.00	0.16	1.17				
G2	1532 Peckham St.	0.11	0.42	0.27	1.42	1.10	3.67	0.21	1.17	0.60	1.50	0.26	0.58
G3	1668 Merriman Rd.	0.02	0.17	0.39	1.75	1.16	3.50	0.08	0.58				
G4	1200 Firestone Pkwy.	0.00	0.00	0.00	0.00	0.03	0.25	0.00	0.00	0.14	0.67	0.08	0.33
G5	177 S. Broadway St.	0.03	0.25	0.38	1.50	0.72	3.00	0.13	0.92	0.35	1.42	0.13	0.42
G6	574 E. Cuyahoga Falls Ave.	0.07	0.25	0.28	1.33	0.59	2.83	0.10	0.75	0.67	1.67	0.03	0.17
G7	1436 Triplett Blvd.	0.01	0.08	0.26	1.25	0.88	3.08	0.11	0.75	0.14	0.75	0.13	0.67
G8	2100 Eastwood Ave.	0.00	0.00	0.26	1.50	0.72	2.58	0.18	1.17	0.33	1.67	0.04	0.17
G9	3487 S. Smith Rd.	0.30	1.00	1.01	2.67	1.33	4.00	0.16	0.83	0.50	1.08	0.27	0.42
G10	3061 Albrecht Ave.	0.01	0.08	0.23	1.33	0.73	2.83	0.11	0.92	0.16	0.92	0.10	0.42
G11	89 E. Howe Rd.	0.00	0.00	0.32	1.83	0.75	2.58	0.20	1.00	0.43	1.50	0.00	0.00
G12	1100 Graham Circle	0.00	0.00	0.26	1.75	0.54	2.83	0.16	0.92	0.50	1.25	0.00	0.00
G13	10 Ascot Pkwy.												

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	7/8/2020		7/10/2020		7/11/2020		7/13/2020		7/16/2020		7/19/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0	0	0	0	0	0	0.07	0	0.59	0.3396
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0.31	0.5
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0.35	0.0111
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0.29	1.0712
054/R11	Hazel St. – District 4	0	0	0.54	0.2902	0.31	0.0917	0	0	0	0	0.79	0.8758
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0.15	0.0188
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	2	1.4335
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.32	0.0328	0	0	0	0	0.11	0.0008	0	0	0.44	0.179
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.45	0.022	0	0	0	0	0.18	0.0044	0	0	0.48	0.025
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0.57	0.0966	0	0	0	0	0.31	0.0147	0	0	0.38	0.1218
076/R33	North Side Interceptor @ Main St.	0	0	0	0	2.94	0.013	1.34	0.0042	0	0	1.76	0.0364
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0.05	0	0	0	0	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0.23	0.0042	0	0	0.41	0	0.63	0.0462	0	0	0.77	0.1849
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.65	0.83	0.00	0.00	0.28	1.83	0.05	0.33	0.06	0.17	0.17	0.33
G2	1532 Peckham St.	0.01	0.08	0.00	0.00	0.19	1.17	0.07	0.50	0.00	0.00	0.55	0.50
G3	1668 Merriman Rd.	0.29	0.42	0.00	0.00	0.45	2.08	0.01	0.08	0.00	0.00	0.54	0.50
G4	1200 Firestone Pkwy.	0.02	0.08	0.01	0.08	0.06	0.42	0.00	0.00	0.06	0.08	0.06	0.25
G5	177 S. Broadway St.	0.27	0.83	0.11	0.17	0.19	1.33	0.07	0.25	0.01	0.08	0.76	0.50
G6	574 E. Cuyahoga Falls Ave.	0.10	0.50	0.03	0.25	0.36	1.92	0.40	0.33	0.00	0.00	0.79	0.50
G7	1436 Triplett Blvd.											0.26	0.33
G8	2100 Eastwood Ave.	0.01	0.08	0.00	0.00	0.34	2.17	0.06	0.25	0.12	0.25	0.78	0.42
G9	3487 S. Smith Rd.	0.00	0.00	0.00	0.00	0.25	1.25	0.07	0.25	0.00	0.00	0.05	0.17
G10	3061 Albrecht Ave.	0.00	0.00	0.00	0.00	0.29	1.75	0.00	0.00	0.02	0.17	0.36	0.33
G11	89 E. Howe Rd.	0.01	0.08	0.18	0.42	0.46	2.42	0.41	0.83	0.03	0.17	0.60	0.67
G12	1100 Graham Circle	0.01	0.08	0.12	0.25	0.60	2.67	0.01	0.08	0.00	0.00	0.06	0.50
G13	10 Ascot Pkwy.	0.06	0.25	0.00	0.00	0.34	1.92	0.05	0.17	0.00	0.00	0.31	0.33

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	7/20/2020		7/22/2020		7/23/2020		7/27/2020		7/28/2020		8/1/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0.69	0.1219	0	0	0.65	0.3788	0.35	0.0305	0.14	0.0044
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0.08	0.0102	0.4	0.2393	0.1	0.0102	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0.09	0.0008	0	0	0	0	0.31	0.0246	0.49	0.0304
070/R27	Uhlr Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0.15	0.0044	0.16	0.0015	0	0	0.54	0.0191	0.82	0.025
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0.24	0.0126	0.15	0.0147	0	0	0.54	0.021	0.42	0.0378
076/R33	North Side Interceptor @ Main St.	0	0	2.5	0.0109	1.69	0.0078	0	0	1.73	0.0203	2.89	0.0167
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0.07	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0.68	0.0315	0.35	0.0189	0	0	0.85	0.0735	0.79	0.0819
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.00	0.00	0.20	0.83	0.14	0.58	0.90	0.75	0.07	0.33	0.22	1.42
G2	1532 Peckham St.	0.00	0.00	0.28	1.00	0.32	0.75	0.19	0.33	0.34	0.75		
G3	1668 Merriman Rd.	0.00	0.00	0.29	1.08	0.24	1.00	0.08	0.25	0.72	0.83	0.31	1.58
G4	1200 Firestone Pkwy.	0.00	0.00	0.08	0.25	0.06	0.42	0.01	0.08	0.00	0.00	0.02	0.17
G5	177 S. Broadway St.	0.00	0.00	0.24	1.00	0.17	0.67	0.36	0.58	0.30	0.83	0.29	1.50
G6	574 E. Cuyahoga Falls Ave.	0.00	0.00	0.39	1.17	0.17	0.75	0.07	0.25	0.53	0.83	0.46	1.75
G7	1436 Triplett Blvd.	0.00	0.00	0.36	1.17	0.05	0.33	0.91	0.67	0.10	0.67	0.23	1.58
G8	2100 Eastwood Ave.	0.00	0.00	0.34	1.00	0.13	0.50	0.18	0.50	0.31	0.83	0.23	1.33
G9	3487 S. Smith Rd.	0.00	0.00	0.28	1.00	0.22	1.08	0.07	0.33	0.44	0.83	0.39	2.25
G10	3061 Albrecht Ave.	0.00	0.00	0.32	1.17	0.05	0.25	0.68	0.58	0.11	0.75	0.28	1.58
G11	89 E. Howe Rd.	0.00	0.00	0.37	1.17	0.18	0.92	0.05	0.25	0.57	1.00	0.52	1.92
G12	1100 Graham Circle	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G13	10 Ascot Pkwy.	0.00	0.00	0.24	1.00	0.22	1.17	0.02	0.08	0.66	1.50	0.37	1.58

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	8/3/2020		8/4/2020		8/13/2020		8/16/2020		8/26/2020		8/27/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0.6	0.1219	0.07	0	0	0	0.22	0.0087	0.22	0.0131	0.12	0
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0.3	0.0018
053/R10	Case Ave. – Newton St. District	0	0	0.06	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0.18	0.0306	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.4	0.0476	0	0	0	0	0.11	0	0.12	0.0016	0.13	0.0049
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.45	0.0161	0.19	0.0015	0	0	0.2	0.0015	0.12	0	0.16	0.0029
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0.39	0.0294	0.15	0.0042	0	0	0	0	0.04	0	0	0
076/R33	North Side Interceptor @ Main St.	1.8	0.0088	2.99	0.0073	0.25	0.0016	1.4	0.0042	0.78	0	0.39	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0.73	0.063	0.9	0.0693	0	0	1.4	0.3102	0.34	0.0168	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.49	1.08	0.32	1.08	0.00	0.00	0.29	1.25	0.51	0.92	0.07	0.42
G2	1532 Peckham St.	0.09	0.58	0.15	0.58	0.00	0.00	0.41	1.25	0.16	0.83	0.03	0.08
G3	1668 Merriman Rd.	0.15	0.75	0.28	1.08	0.00	0.00	0.35	1.25	0.30	0.92	0.00	0.00
G4	1200 Firestone Pkwy.	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08
G5	177 S. Broadway St.	0.20	0.83	0.24	1.17	0.00	0.00	0.23	1.17	0.19	0.83	0.18	0.17
G6	574 E. Cuyahoga Falls Ave.	0.34	1.08	0.45	1.25	0.00	0.00	0.27	1.17	0.22	0.75	0.05	0.17
G7	1436 Triplett Blvd.	0.22	0.83	0.42	0.92	0.00	0.00	0.15	1.08	0.10	0.67	0.04	0.08
G8	2100 Eastwood Ave.	0.15	0.83	0.71	0.92	0.00	0.00	0.25	1.17	0.19	0.75	0.15	0.17
G9	3487 S. Smith Rd.	0.13	0.67	0.42	1.58	0.00	0.00	0.62	1.33	0.38	1.17	0.11	0.08
G10	3061 Albrecht Ave.	0.07	0.50	0.44	0.75	0.00	0.00	0.12	1.00	0.12	0.50	0.04	0.17
G11	89 E. Howe Rd.	0.27	0.92	0.61	1.25	0.00	0.00	0.17	1.08	0.08	0.50	0.00	0.00
G12	1100 Graham Circle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.67	0.01	0.08
G13	10 Ascot Pkwy.	0.16	0.67	0.51	1.08	0.00	0.00	0.20	1.00	0.20	0.75	0.01	0.08

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	8/28/2020		8/29/2020		9/2/2020		9/7/2020		9/13/2020		9/28/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	6.55	1.9505	0	0	0.77	0.1088	6.76	2.4555	0.26	0.0131	0	0
047/R04	Mill St.	0.19	0.0441	0	0	0	0	0.75	0.6738	0	0	0	0
049/R06	Factory St.	0.2	0.0026	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	1.02	1	0	0	0	0	1.46	3.9232	0	0	0	0
054/R11	Hazel St. – District 4	2.75	0.667	0	0	0	0	5.43	3.0143	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	6.2	7.3	0	0	0	0
057/R14	Forge Field Storage Basin	2.3	1.5584	0.2	0.0014	0	0	9.6	5.4274	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	2.5	0.7112	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0.12	0.0063	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	4.6	10.4544	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	1.92	0.225	0	0	0.07	0	4.7	1.4457	0.18	0.0123	0.35	0.0345
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	2.07	0.0587	0	0	0.19	0	5.05	0.2334	0.25	0.0103	0.55	0.0323
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0.8	0.0504	0	0	0.13	0.0063	3.77	0.3613	0.22	0.0084	0.47	0.0126
076/R33	North Side Interceptor @ Main St.	0	0	0	0	2.75	0.0088	12.24	0.2524	1.49	0.0042	0	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0.04	0	0.4	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	0.5	0.0369	2.7	0.2296	0.45	0.042	3	0.3919
080/R37	Bowery Street	0	0	0	0	0	0	0	0.0008	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	2.6	3.4089	0	0	0	0	6.2	9.794	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	3.15	26.5841	0	0	0	0	6.3	51.2236	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	3.42	5.83	0.03	0.17	0.19	1.17	2.48	4.58	0.22	0.92	0.65	3.42
G2	1532 Peckham St.	1.01	4.25	0.00	0.00	0.19	0.92	1.76	4.83	0.13	0.58		
G3	1668 Merriman Rd.	1.61	4.67	0.02	0.17	0.29	1.42	3.43	5.67	0.38	0.92	0.93	4.17
G4	1200 Firestone Pkwy.	1.75	5.08	0.01	0.08	0.33	1.75	2.18	4.83	0.18	0.92	0.56	3.00
G5	177 S. Broadway St.	1.58	4.83	0.03	0.08	0.24	1.00	2.66	5.33	0.06	0.50	0.32	1.67
G6	574 E. Cuyahoga Falls Ave.	1.33	5.17	0.02	0.17	0.29	1.33	2.68	5.33	0.19	0.75	0.77	3.50
G7	1436 Triplett Blvd.	3.03	5.58	0.02	0.17	0.24	1.08	2.21	5.00	0.20	1.08	0.65	3.67
G8	2100 Eastwood Ave.	1.85	5.17	0.03	0.25	0.27	1.08	3.07	5.42	0.24	0.92	0.69	3.92
G9	3487 S. Smith Rd.	1.53	4.50	0.03	0.17	0.34	1.42	3.79	6.08	0.45	0.92	1.09	4.08
G10	3061 Albrecht Ave.	2.65	5.83	0.01	0.08	0.40	1.42	2.04	5.08	0.40	1.42	0.54	3.08
G11	89 E. Howe Rd.	1.48	5.33	0.01	0.08	0.36	1.50	2.93	5.42	0.23	1.00	0.72	3.92
G12	1100 Graham Circle	1.47	5.25	0.00	0.00	0.24	1.42	2.18	4.08	0.55	1.08	0.91	3.58
G13	10 Ascot Pkwy.	1.75	5.08	0.01	0.08	0.33	1.75	3.62	5.50	0.52	0.92	0.90	4.00

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	10/4/2020		10/12/2020		10/13/2020		10/19/2020		10/20/2020		10/21/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0	0	0	0	0	0	0	0	0	0
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0.21	0.0107	0.16	0.0008	0	0	0	0	0.31	0.0369
070/R27	Uhlr Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0.25	0.0161	0.11	0	0	0	0	0	0.45	0.0206
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0.23	0.0042	0	0	0	0	0.04	0
076/R33	North Side Interceptor @ Main St.	1.77	0.013	0	0	2.86	0.0369	3.3	0.0284	1.7	0.0049	2.93	0.0161
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0	0	0	0	0.45	0.002
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0	0	0	0	1.75	0.1533	0.66	0.0063	0.42	0.0105	0.45	0.0399
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.21	1.25	0.20	0.25	0.24	1.25	0.64	5.17	0.54	3.17	0.12	0.67
G2	1532 Peckham St.												
G3	1668 Merriman Rd.	0.19	1.33	0.12	0.25	0.30	1.17	0.58	4.50	0.40	3.00	0.37	1.17
G4	1200 Firestone Pkwy.	0.15	1.17	0.16	0.25	0.32	1.50	0.59	4.75	0.50	3.17	0.12	0.67
G5	177 S. Broadway St.	0.00	0.00	0.10	0.17	0.37	1.17	0.19	1.50	0.53	3.58	0.13	0.67
G6	574 E. Cuyahoga Falls Ave.	0.16	1.08	0.07	0.17	0.47	1.67	0.57	4.58	0.41	2.92	0.31	1.25
G7	1436 Triplett Blvd.	0.24	1.75	0.08	0.08	0.58	1.58	0.59	4.83	0.54	3.17	0.05	0.42
G8	2100 Eastwood Ave.	0.19	1.50	0.03	0.08	0.61	1.92	0.60	4.92	0.57	3.50	0.14	0.75
G9	3487 S. Smith Rd.	0.16	1.08	0.24	0.42	0.24	0.92	0.57	4.50	0.37	2.58	0.29	1.33
G10	3061 Albrecht Ave.	0.20	1.25	0.01	0.08	0.68	1.75	0.60	5.00	0.57	3.42	0.07	0.42
G11	89 E. Howe Rd.	0.15	1.08	0.02	0.08	0.61	1.67	0.63	4.92	0.44	3.25	0.14	0.75
G12	1100 Graham Circle	0.17	1.42	0.00	0.00	0.37	3.08	0.47	2.42	0.47	2.17	0.26	1.92
G13	10 Ascot Pkwy.	0.18	1.33	0.05	0.25	0.38	1.33	0.53	4.25	0.38	2.58	0.35	1.17

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	10/23/2020		10/27/2020		10/28/2020		10/29/2020		10/30/2020		11/1/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0	0	0	0	0	0	0	0	0	0
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.21	0.0115	0	0	0	0	1.23	0.0107	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.31	0.0103	0	0	0	0	3.48	0.0338	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0.17	0.002	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0.25	0.0042	0	0	0	0	0	0	0	0	0	0
076/R33	North Side Interceptor @ Main St.	1.98	0.0083	0.68	0.001	1.16	0	9.4	0.1462	4.17	0.0151	1.01	0.0016
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0	0	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	0.67	0.0567	0	0	0	0	2.3	0.4919	0	0	0	0
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	4.2	15.014	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.30	1.17	0.18	1.50	0.17	1.42	1.62	11.58	0.16	1.25	0.09	0.50
G2	1532 Peckham St.												
G3	1668 Merriman Rd.	0.37	1.08	0.20	1.67	0.16	1.33	1.58	10.92	0.25	2.00	0.09	0.67
G4	1200 Firestone Pkwy.	0.13	0.75	0.17	1.42	0.15	1.25	1.47	11.17	0.11	0.83	0.07	0.42
G5	177 S. Broadway St.	0.33	1.08	0.21	1.75	0.17	1.42	1.64	11.42	0.18	1.50	0.09	0.58
G6	574 E. Cuyahoga Falls Ave.	0.28	1.08	0.20	1.67	0.17	1.42	1.52	10.58	0.22	1.83	0.10	0.75
G7	1436 Triplett Blvd.	0.30	1.17	0.18	1.50	0.16	1.33	1.65	11.83	0.13	1.08	0.07	0.50
G8	2100 Eastwood Ave.	0.28	0.92	0.20	1.67	0.18	1.50	1.63	11.50	0.18	1.42	0.08	0.58
G9	3487 S. Smith Rd.	0.98	1.17	0.22	1.83	0.17	1.42	1.53	10.75	0.25	2.00	0.11	0.75
G10	3061 Albrecht Ave.	0.25	1.17	0.18	1.50	0.17	1.42	1.53	11.08	0.13	1.08	0.08	0.50
G11	89 E. Howe Rd.	0.34	1.25	0.22	1.83	0.18	1.50	1.59	11.00	0.19	1.42	0.10	0.67
G12	1100 Graham Circle	0.00	0.00	0.01	0.08	0.01	0.08	0.01	0.08	0.02	0.17	0.10	0.67
G13	10 Ascot Pkwy.	0.53	1.17	0.19	1.58	0.17	1.42	1.47	10.50	0.30	2.25	0.10	0.75

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	11/11/2020		11/15/2020		11/19/2020		11/22/2020		11/25/2020		11/26/2020	
Overflows													
Station/Rack	Location	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0	0	0	0	0	0	0	0	0	0
047/R04	Mill St.	0	0	0	0	0	0	0	0	0	0	0	0
049/R06	Factory St.	0	0	0	0	0	0	0	0	0.17	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0	0	0	0	0	0.2	0.0162	0.2	0.0019
054/R11	Hazel St. – District 4	0	0	0	0	0	0	0	0	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0	0	0	0	0	0	0	0	0
060/R17	Exchange St.	0	0	0	0	0	0	0	0	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0	0	0	0	0	0	0	0	0
062/R19	West Market St.	0	0	0	0	0	0	0	0	0	0	0	0
063/R20	West North St.	0	0	0	0	0	0	0	0	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0	0	0	0	0	0	0	0	0
066/R23	North Maple St.	0	0	0	0	0	0	0	0	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0	0	0	0	0	0	0	0.16	0
069/R26	Aqueduct St outlet E. of Hickory St.	0.07	0	0	0	0.54	0.0008	0	0	0.25	0.0016	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0	0	0	0	0	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0.14	0	0	0	0	0	0.2	0	0.35	0.0059	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0	0	0	0	0	0	0	0	0	0	0
075/R32	Carpenter Heights District	0	0	0	0	0	0	0	0	0.18	0.0021	0	0
076/R33	North Side Interceptor @ Main St.	3.1	0.0342	0.48	0	0	0	4.69	0.0161	4.87	0.0135	1.54	0.0052
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0	0	0	0.17	0	0.33	0	1.1	0.0108
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	1.5	0.084	0	0	0	0	0.81	0.0651	0.53	0.0378	0.29	0.0105
080/R37	Bowery Street	0	0	0	0	0	0	0	0	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0	0	0	0	0	0	0	0	0	0	0
083/R40	Cuyahoga Street Storage Facility	0	0	0	0	0	0	0	0	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0	0	0	0	0	0	0	0	0

Rain Gauge	Location	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.58	2.67	0.23	1.25	0.00	0.00	0.53	3.50	0.81	4.58	0.05	0.42
G2	1532 Peckham St.												
G3	1668 Merriman Rd.	0.51	2.92	0.28	1.58	0.00	0.00	0.49	3.58	0.52	3.58	0.08	0.67
G4	1200 Firestone Pkwy.	0.52	2.33	0.22	1.08	0.00	0.00	0.53	3.75	0.82	4.33	0.03	0.25
G5	177 S. Broadway St.	0.55	2.83	0.24	1.25	0.00	0.00	0.56	3.75	0.81	4.00	0.08	0.67
G6	574 E. Cuyahoga Falls Ave.	0.43	2.42	0.20	1.17	0.00	0.00	0.54	3.83	0.50	3.08	0.07	0.50
G7	1436 Triplett Blvd.	0.42	2.00	0.30	1.08	0.00	0.00	0.56	3.92	0.57	3.08	0.05	0.33
G8	2100 Eastwood Ave.	0.49	2.25	0.32	1.17	0.00	0.00	0.57	3.92	0.67	3.75	0.06	0.50
G9	3487 S. Smith Rd.	0.44	2.50	0.21	1.42	0.00	0.00	0.52	3.67	0.56	3.83	0.06	0.50
G10	3061 Albrecht Ave.	0.39	2.17	0.28	1.42	0.00	0.00	0.57	3.83	0.57	3.17	0.09	0.42
G11	89 E. Howe Rd.	0.59	2.58	0.22	1.33	0.00	0.00	0.58	4.00	0.70	3.75	0.09	0.67
G12	1100 Graham Circle	0.52	3.08	0.27	1.42	0.00	0.00	0.54	3.50	0.46	3.33	0.09	0.67
G13	10 Ascot Pkwy.	0.42	2.50	0.26	1.42	0.00	0.00	0.47	3.25	0.46	3.33	0.12	0.92

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

CSO Occurrences, Overflow Volumes and Precipitation Data, 1/1/2020 - 12/31/20

	Date:	11/30/2020		12/12/2020	
Overflows					
Station/Rack	Location	Dur	Volume	Dur	Volume
046/R03	Kelly Ave.	0	0	0	0
047/R04	Mill St.	0	0	0	0
049/R06	Factory St.	0	0	0	0
053/R10	Case Ave. – Newton St. District	0	0	0	0
054/R11	Hazel St. – District 4	0	0	0	0
055/R12	Camp Brook Storage Basin	0	0	0	0
057/R14	Forge Field Storage Basin	0	0	0	0
058/R15	Cascade Village Storage Basin	0	0	0	0
059/R16	Wolf Ledges Trunk	0	0	0	0
060/R17	Exchange St.	0	0	0	0
061/R18	Willow Run Trunk	0	0	0	0
062/R19	West Market St.	0	0	0	0
063/R20	West North St.	0	0	0	0
065/R22	Howard Street Storage Basin	0	0	0	0
066/R23	North Maple St.	0	0	0	0
067/R24	West Market St Outlet @ Ravine St.	0	0	0	0
069/R26	Aqueduct St outlet E. of Hickory St.	0	0	0	0
070/R27	Uhler Ave. @ Memorial Parkway	0	0	0	0
071/R28	Memorial Parkway @ Hickory St.	0	0	0	0
072/R29	Uhler Ave. – Carpenter St. Outlet	0	0		
075/R32	Carpenter Heights District	0	0	0	0
076/R33	North Side Interceptor @ Main St.	13.04	0.0255	0.44	0
077/R34	Riverside Dr. Dist. @ MetroParks Rd.	0	0	0	0
078/R35	Gorge Blvd. Dist. @ Front St. Bridge	1.39	0.0252	0	0
080/R37	Bowery Street	0	0	0	0
081/R02	Goodyear Retention Tank 1376 9th Ave	0	0		
083/R40	Cuyahoga Street Storage Facility	0	0	0	0
084/OCIT	Ohio Canal Interceptor Tunnel (OCIT)	0	0	0	0
Rain Gauge	Location	Depth	Dur	Depth	Dur
G1	2644 Cordelia Ave.	0.85	6.83	0.12	0.75
G2	1532 Peckham St.				
G3	1668 Merriman Rd.	0.93	7.58	0.20	1.33
G4	1200 Firestone Pkwy.	0.69	5.58	0.13	0.92
G5	177 S. Broadway St.	0.87	6.92	0.11	0.83
G6	574 E. Cuyahoga Falls Ave.	0.87	6.92	0.11	0.83
G7	1436 Triplett Blvd.	0.89	7.25	0.23	1.00
G8	2100 Eastwood Ave.	0.85	6.83	0.28	1.17
G9	3487 S. Smith Rd.	0.81	6.50	0.11	0.92
G10	3061 Albrecht Ave.	0.74	6.08	0.18	1.00
G11	89 E. Howe Rd.	0.70	5.75	0.12	0.83
G12	1100 Graham Circle	0.91	7.33	0.30	1.50
G13	10 Ascot Pkwy.	0.89	7.08	0.22	1.42

Units: Duration-Hours; Volume-Million Gallons; Depth-Inches

Appendix B

Consent Decree Semi-Annual Report #22
(July 1, 2020 - December 31, 2020)

Section 1: Specific Action Projects

1.A Upgrade of the WPCS (Phase 1)

Status of Work Plan Development	The Work Plan for Water Pollution Control Station (WPCS) improvements was submitted to EPA on February 10, 2010 per the Consent Decree.
Status of Design and Construction Activities	Design and construction are complete. Certificate of Achievement of Full Operation was issued and acknowledged on September 20, 2013.
Status of Stress Test Protocol Development	Stress Tests are complete.
Status and Results of Stress Tests	Stress Tests are complete. The Final Demonstration Testing Evaluation Report was submitted to EPA on October 15, 2015, per the Consent Decree.
Capacity Achieved at the WPCS After Upgrade	The Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 have achieved 30 MGD of wet weather treatment capacity.
Project Cost Incurred During Reporting Period	No project costs were incurred during the reporting period.

1.B Upgrade of the WPCS (Contingency Projects)

The Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 achieved 30 MGD of wet weather treatment capacity, therefore, this Consent Decree item is not applicable.

1.C Status of Sewer Separation Projects

1.C.1 Rack 8 Separation Project

Activities Undertaken During Reporting Period	Project is complete.
Status of Construction	Construction is complete.
Date of Anticipated Completion	Achievement of Full Operation occurred on December 14, 2012.

Project Cost Incurred During Reporting Period	No project costs were incurred during the reporting period.
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1.C.2 Rack 25 Separation Project

Activities Undertaken During Reporting Period	Project is complete.
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Status of Construction	Construction is complete.
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Date of Anticipated Completion	Achievement of Full Operation occurred on December 14, 2012.
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Project Cost Incurred During Reporting Period	No project costs were incurred during the reporting period.
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1.C.3. Rack 21 Separation Project

Activities Undertaken During Reporting Period	Work on this project is substantially complete. This project is now in the warranty period. Work continues on the sub-final punch list.
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Status of Construction	Construction is substantially complete.
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Date of Anticipated Completion	Achievement of Full Operation occurred on November 9, 2017. Construction was substantially complete November 13, 2017.
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Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately \$482,517.64
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1.C.4 Rack 13 Separation Project

Activities Undertaken During Reporting Period	Project is complete.
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Status of Construction	Construction is complete.
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Date of Anticipated Completion	Achievement of Full Operation occurred on October 14, 2016.
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Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

1.C.5 Rack 30 Separation Project

Activities Undertaken During Reporting Period Project is complete.

Status of Construction Construction is complete.

Date of Anticipated Completion Achievement of Full Operation occurred on November 9, 2017. Construction on Rack 30 was substantially complete November 13, 2017.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

Section 2: CSO and WPCS Control Measures

2.A Status of Document Preparation

Table 2-1 shows the current status of documents as listed in Table 1 in Paragraph 17 of the Consent Decree. Documents listed in **bold** have been completed as of the end date of this reporting period.

Table 2-1 Status of Document Preparation

Document	Consent Decree Due Date	Date Submitted or Date of Anticipated Completion
Updated NFA and supplement	November 30, 2009	November 25, 2009
Preliminary Report on Modeling to Predict Size and Number of Overflows	January 15, 2010	January 13, 2010
Preliminary Report on Cost/Benefit Comparison to Predict Sizes and Number of Overflows	March 15, 2010	March 12, 2010
CSO Control Measure Cost/Benefit Tables at Appendix 2 of Attachment A	May 15, 2010	May 14, 2010
Updated Financial Capability Information	May 15, 2010	May 14, 2010
Post-Construction Monitoring Program	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update Report	August 15, 2010	August 16, 2010
Final Long-Term Control Plan Update	October 15, 2010	October 15, 2010 Revised: February 28, 2011
Final Long-Term Control Plan Update Report	October 15, 2010	October 15, 2010 Revised: February 28, 2011 Revised: November 15, 2011 USEPA Approved: November 16, 2011 Ohio EPA Approved: April 11, 2012
Report on Revising WPCS Control Measure(s) if Akron achieves 130 MGD through secondary treatment using step feed	October 15, 2016	October 14, 2016
Report on Revising WPCS Control Measure(s) if Akron constructs the WPCS Contingency Project	October 15, 2017	N/A

2.A.1 Development of an Integrated Plan

The City's LTCP Update was approved by USEPA on November 16, 2011 and Ohio EPA on April 11, 2012. The LTCP Update was incorporated into the court-approved Consent Decree on January 17, 2014.

The City submitted an Integrated Plan on July 31, 2015 in accordance with USEPA's June 5, 2012 Integrated Planning Framework (IPF) Guidance. The parties participated in several conferences and exchanged several documents regarding the City's proposed Integrated Plan. The City continued to comply with the requirements within the Consent Decree, including, but not limited to, the LTCP Update, during the ongoing discussions of the proposed Integrated Plan.

The parties subsequently agreed to suspend further discussions over the proposed Integrated Plan. At the same time, it was understood that the City would submit requests to modify the LTCP Update, independent of the integrated planning process. Those proposed modifications are discussed in the following section.

2.A.2 Consent Decree Modifications

As a result of ongoing Consent Decree negotiations, modifications were made pursuant to Exhibit 2 and Exhibit 3 of the Consent Decree, and the Court has approved the First Amendment to Consent Decree and the Second Amendment to Consent Decree. Those modifications are discussed below.

The City received modification approval letters under Exhibit 3 of the LTCP for the following green infrastructure ("GI") projects:

- Rack 36 – approval letter issued on October 30, 2015;
- Rack 5/7 – approval letter issued on December 7, 2015;
- Rack 22 – approval letter issued on December 7, 2015.

Based upon a subsequent agreement of the parties, the City has constructed the original Rack 22 storage basin in lieu of the approved green infrastructure project.

On January 15, 2016 the City submitted an Alternative Plan to the Sizing of Secondary Treatment Capacity under Exhibit 2 of the LTCP Update. USEPA approved the City's Alternative Plan on February 11, 2016. Based on this approval, the WPCS Phase 2 projects were then subject to the requirements of the LTCP Update Rows 17 and 18.

The Court entered the First Amendment to the Consent Decree on September 20, 2016, which modified the Consent Decree as follows: (1) changed the sequencing of the WPCS Phase 2 projects and (2) replaced the MOI parallel relief sewer project with the MOI capping project. The First Amendment to Consent Decree switched the deadlines for the projects in LTCP Update Rows 17 and 18, and replaced the original LTCP Update Rows 21 and 22 with new Rows 21, 22 and 23.

The Court entered the Second Amendment to the Consent Decree on December 17, 2019 which further modified the Consent Decree as follows: (1) replaced the requirement for the BioACTIFLO facility in LTCP Update Row 18 with a BioCEPT facility and a demonstration study as now required in new LTCP Update Rows 18 and 18.a., respectively; and (2) replaced the Racks 3, 26/28 and

27/29 storage basins required in LTCP Update Rows 1, 8 and 9 with upsized underflow drains and pipes (“optimized conveyance”) and two GI projects, including GI operation and maintenance (“O&M”) requirements, and increased the size of the Rack 10/11 storage basin required in Row 3 from 2.5 MG to 4.5 MG. LTCP Update Rows 1, 3, 8 and 9 are now replaced with amended Rows 1, 3, 8 and 9 and new Rows 1.a., 8.a., and 9.a.

The City previously proposed to modify the requirement for the EHRT unit in LTCP Update Row 11a, as well as to replace the NSI tunnel in Row 12 with an alternative set of controls referred to as the NSI Projects. In 2017, the City informed USEPA and Ohio EPA of its decision to defer those requests to a later date. In 2020 the City informed U.S. EPA and Ohio EPA that it wanted to renew its request to eliminate the requirement for the EHRT and to replace the NSI tunnel with the NSI Projects and incorporated these modifications into a Third Amendment to the Consent Decree. During this reporting period, the Parties engaged in monthly calls to discuss these proposed modifications.

2.B Progress Towards Completing Milestones in Approved LTCP Update

Progress on completing milestones, including status of progress toward Achievement of Full Operation, for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update is provided in Table 2-2. The Consent Decree was entered January 17, 2014 and amendments were entered on September 20, 2016 and December 17, 2019. In addition, under USEPA’s Integrated Plan Framework, during this reporting period the City continued with Long Term Control Plan Optimization to evaluate and identify alternative solutions for the controls listed in the LTCP Update that have yet to be constructed.

**Table 2-2 Status of Progress and Cost Incurred During Reporting Period
For Control Measures Set Forth in Approved LTCP Update**

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
1	Rack 3	Green infrastructure plus optimized conveyance	<p>Bidding of Control Measure – June 30, 2018.</p> <p>Achievement of Full Operation – November 30, 2020.</p>	<p>The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with Green infrastructure plus optimized conveyance.</p> <p>Kelly Conveyance (CSO Rack 3) Notice to Proceed was issued on December 5, 2019. Achievement of Full Operation occurred on November 9, 2020.</p> <p>Chittenden Green Project (CSO Rack 3) Notice to Proceed was issued on May 7, 2019. Achievement of Full Operation occurred on May 5, 2020.</p> <p>Duane Green Project (CSO Rack 3) Notice to Proceed was issued on January 14, 2020. Achievement of Full Operation occurred on November 25, 2020.</p> <p>Work continues on remaining punch list items.</p>	<p>Project costs incurred during the reporting period for all Kelly (CSO Rack 3) projects were approximately \$3,725,929.37</p>

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
1.a.	Rack 3	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than August 30, 2020	The City submitted the required GI O&M Plan on August 26, 2020. U.S. EPA provided the City of Akron with written comments to the GI O&M Plan on November 18, 2020 and the parties discussed U.S. EPA's comments on November 19, 2020. The City of Akron then revised the GI O&M Plan to address U.S. EPA's comments, and provided the revised version to U.S. EPA on December 10, 2020. On December 17, 2020, U.S. EPA informed the City of Akron that the revised plan was acceptable. The City will formally submit the revised O&M Plan.	
2	Rack 5 and 7	Green Infrastructure and Sewer Separation (Per Exhibit 3)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Construction Notice to Proceed was issued on June 21, 2016. Achievement of Full Operation occurred on October 26, 2017. Sub-final punch list is complete.	Project costs incurred during the reporting period were approximately \$32,471.33
3	Racks 10 and 11	Storage Basin(s)	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – December 31, 2020.	The Court entered the Second Amendment to the Consent Decree December 17, 2019 which increased the size of the storage basin from 2.5 to 4.5 MG. Construction Notice to Proceed was issued on September 24, 2018. Achievement of Full Operation occurred on July 23, 2020. Remaining punch list work continues.	Project costs incurred during the reporting period were approximately \$2,199,272.47

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
4	Rack 12	Storage Basin(s)	Bidding of Control Measure – November 30, 2014. Achievement of Full Operation – October 31, 2017.	Construction Notice to Proceed was issued on May 29, 2015. Achievement of Full Operation occurred on October 30, 2017. Work continues on remaining punch list items.	Project costs incurred during the reporting period were approximately \$549,993.43
5	Rack 14	Storage Basin(s)	Bidding of Control Measure – October 31, 2014. Achievement of Full Operation – April 30, 2017.	Project complete. Achievement of Full Operation occurred on January 3, 2017.	No costs were incurred during the reporting period.
6	Rack 15	Storage Basin(s)	Bidding of Control Measure – November 30, 2013. Achievement of Full Operation – October 31, 2015.	Project complete. Project placed in service on October 30, 2015. Achievement of Full Operation occurred on February 17, 2016.	No costs were incurred during the reporting period.
7	Rack 22	Storage Basin(s)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – December 31, 2017.	Project complete. Achievement of Full Operation occurred on November 29, 2017. Construction is complete.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
8	Rack 26 and 28	Green infrastructure plus optimized conveyance	<p>Bidding of Control Measure – October 31, 2021.</p> <p>Achievement of Full Operation – December 31, 2022.</p>	<p>The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with Green infrastructure plus optimized conveyance.</p> <p>Construction was completed for one aspect of the IP alternative, called Aqueduct Green Street Improvements.</p> <p>The Rack 26 work is being designed in house, with subconsultant design of the Rack structure and foundation, including hydraulic modeling, with two primary alternatives under consideration to minimize work in Hickory. The Rack 28 work is proceeding as design build as a change order to the Uhler project to coordinate with other work on Memorial Parkway.</p>	Project costs incurred during the reporting period were approximately \$ 54,140.92.
8.a.	Rack 26 and 28	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than March 1, 2019	U.S. EPA issued an approval of the City's O&M Plan on October 23, 2019. GI performance reporting is provided in Appendix H.	Costs are reported in Section 2C as part of the overall Program costs.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
9	Rack 27	Optimized conveyance	<p>Bidding of Control Measure – January 31, 2018.</p> <p>Achievement of Full Operation – December 31, 2019.</p>	<p>The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the storage basin with optimized conveyance.</p> <p>The notice to proceed was issued on November 5, 2018.</p> <p>Achievement of Full Operation occurred on December 21, 2019.</p> <p>Final site work and punch list work is ongoing.</p>	Project costs incurred during the reporting period, for both Racks 27 and 29, were approximately \$2,890,608.19
9.a.	Rack 29	Optimized conveyance	<p>Bidding of Control Measure – January 31, 2018.</p> <p>Achievement of Full Operation – December 31, 2019.</p>	See Row 9 above for project update.	See Row 9 above for project costs.
10	Rack 36	Green Infrastructure and Sewer Separation (Per Exhibit 3)	<p>Bidding of Control Measure – October 31, 2015.</p> <p>Achievement of Full Operation – October 31, 2017.</p>	<p>Project is in the warranty period.</p> <p>Achievement of Full Operation occurred on October 30, 2017.</p> <p>Construction was substantially complete as of September 15, 2017.</p> <p>Final punch list work is completed.</p>	Project costs incurred during the reporting period were approximately \$403.83

11	Racks 4, 16, 17, 18, 19, 20, 23, 24, 37	Ohio Canal Tunnel – Construct a 28-foot internal diameter tunnel, 5,500 feet in length, or any other combination of diameter and length that achieves the design criteria.	<p>Bidding of Control Measure – April 30, 2014.</p> <p>Achievement of Full Operation – December 31, 2018.</p>	<p>Notice to Proceed was issued on November 6, 2015.</p> <p>On September 21, 2017, the City submitted a notification that the City has reason to believe that the Ohio Canal Interceptor Tunnel (OCIT) project will not meet the Achievement of Full Operation deadline. The City submitted an amendment to this notification on October 17, 2017. The parties then participated in a conference call on November 29, 2017 and further discussed the status of the schedule of the project. The parties agreed that the City would submit periodic updates on the status of the schedule of the project. The City continued to provide U.S. EPA and Ohio EPA with updated during this reporting period.</p> <p>The OCIT was placed into operation in stages. The racks controlled by the OCIT were tied into, and then controlled by, the OCIT beginning on March 3, 2020. As of May 29, 2020, over 90% of the flow from the racks was tied into and being controlled by the OCIT. The remaining racks were tied into the OCIT as of June 13, 2020. See table 2-3 below for the tie in dates of the racks and the associated percentage of total flow.</p> <p>Achievement of Full Operation occurred on June 29, 2020 with the submission of O&M Plans.</p> <p>Site work is being completed.</p>	Project costs incurred during the reporting period were approximately \$5,841,682.25.
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Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
11a	Racks 16, 17, 18, 19, 20, 23, 24	Ohio Canal Tunnel – ACTIFLO™ Ballasted Flocculation Unit or equivalent technology that meets the Design and Performance Criteria and Disinfection.	<p>Bidding of Control Measure – April 30, 2024.</p> <p>Achievement of Full Operation – October 31, 2027.</p>	<p>LTCP optimization was performed as part of the Integrated Plan in 2015. No advanced facilities planning or design activities were undertaken during the reporting period.</p> <p>The City updated the model to account for the actual OCIT configuration and engaged in flow monitoring activities to recalibrate the model. The parties engaged in multiple discussions regarding the reduced overflow volume at the OCIT and whether or not it is cost effective to treat the remaining overflows.</p>	No costs were incurred during the reporting period.
12	Racks 32, 33, 34, 35	Northside Interceptor Tunnel – Construct a 20-foot internal diameter tunnel, 10,000 feet in length or any other combination of diameter and length that achieves the design criteria.	<p>Bidding of Control Measure – April 30, 2023.</p> <p>Achievement of Full Operation – December 31, 2026.</p>	<p>The City executed a contract to further planning activities for the Integrated Plan project. Activities completed during this period include flow, groundwater and rainfall monitoring; modeling, soil borings, survey, private property I/I evaluations, coordination with utilities and stakeholders, constructability reviews, public outreach, and initial evaluation of alternatives.</p> <p>Most of the field work for the foregoing was completed during this reporting period and the City began to update and recalibrate the model for the NSI drainage basin. The parties engaged in several calls to discuss the City's plans to replace the NSIT with the Integrated Plan project.</p>	Project costs incurred during the reporting period were approximately \$ 4,014,420.78.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
13a	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by implementing step feed operation in Train 6, as described in Paragraph 10.A of the Consent Decree.	Bidding of Control Measure – October 31, 2011. Achievement of Full Operation – October 15, 2013.	Project complete (see Section 1.A of this Semi-Annual Report).	No costs were incurred during the reporting period.
13b	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by performing the upgrades identified in the Consent Decree in Section V.10.C.	Bidding of Control Measure – January 15, 2016. Achievement of Full Operation – October 15, 2017.	Since the Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 have achieved 30 MGD of wet weather treatment capacity, this Consent Decree item is not required.	No costs were incurred during the reporting period.
14	WPCS Phase 1 BioACTIFLO™ Wet Weather Treatment Pilot Study (the “Pilot Study”)	Conduct the Pilot Study in accordance with Exhibit 1 to this Long Term Control Plan Update.	Pilot Study Start Date – May 1, 2012. Pilot Study Completion Date – November 30, 2013. Pilot Study Report submitted to EPA by December 31, 2013.	Study is complete. USEPA issued a concurrence letter on April 8, 2015.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
15	WPCS Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to 170 MGD.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 1 per US EPA approval of Alternate Plan A on February 11, 2016.	No costs were incurred during the reporting period.
16	WPCS Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to treat all flow that does not receive conventional secondary treatment. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 2 per US EPA approval of Alternate Plan A on February 11, 2016.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
17	WPCS Alternative Plan A – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan A approved by USEPA.	<p>Bidding of Control Measure – April 30, 2017.</p> <p>Achievement of Full Operation – April 30, 2019.</p>	<p>USEPA issued an approval of Alternative Plan A on February 11, 2016 to upgrade conventional secondary treatment capacity to 220 MGD.</p> <p>The construction Notice to Proceed was issued on August 24, 2016.</p> <p>Construction is complete. Achievement of Full Operation occurred on April 30, 2019.</p> <p>The sequence of the WPCS Alternative A Phase 2, Part 1(Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report.</p>	Project costs incurred during the reporting period were approximately \$38,441.82.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
18	WPCS Alternative Plan A – Phase 2 – Part 2*	Install – BioCEPT to achieve a minimum capacity of 60 MGD. In addition, all flows receiving BioCEPT shall receive disinfection during the recreation season.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	BioCEPT is to achieve a minimum sustained capacity of 60 MGD. The Notice to Proceed was issued to the Contractor on May 31, 2019. Construction is ongoing. The sequence of the WPCS Alternative A Phase 2, Part 1 (Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report. The Court entered the Second Amendment to the Consent Decree December 17, 2019 which replaced the BioACTIFLO facility with a BioCEPT facility and an additional demonstration study. The replacement project was approved by USEPA and Ohio EPA, see Section 2.A.2.	Project costs incurred during the reporting period were approximately \$21,306,946.50.
19	WPCS Alternative Plan B – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan B approved by USEPA.	Bidding of Control Measure – December 31, 2019. Achievement of Full Operation – December 31, 2021.	Not Applicable	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
20	WPCS Alternative Plan B – Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to achieve the minimum capacity specified in Alternative Plan B approved by USEPA. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	Not Applicable	No costs were incurred during the reporting period.

*Alternative Plan to Upgrading Conventional Secondary Treatment to 170 MGD:

- 1) If US EPA approves in writing an Alternative Plan A, in accordance with Exhibit 2 to the LTCP update, then Akron shall implement the control measures specified in the First Amendment in Rows 17 and 18, instead of the control measures specified in Rows 15 and 16
- 2) If US EPA approves in writing an Alternative Plan B, in accordance with attachment to the LTCP update, then Akron shall implement the control measures specified in the First Amendment in Rows 19 and 20, instead of the control measures specified in Rows 15 and 16

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
(2) Collection System Measures					
21	Main Outfall Sewer Upgrades – Phase I	Installation of pneumatically placed, steel reinforced mortar cap over the entire length of the brick-arch section of the Main Outfall Interceptor (“MOI”) that runs between Survey Station 83+00 and the rectangular bridge section that is located upstream of the WPCS (“the Bridge Section”). The Bridge Section is not of brick-arch construction, and the approximately 400-foot portion of the MOI between the Bridge Section and the WPCS is covered with soil. As part of Phase I, a limited amount of additional soil will be added to the brick-arch portion of the MOI between the Bridge Section and the WPCS headworks.	Bidding of Control Measures: May 4, 2016 Achievement of Full Operation: November 30, 2017.	Project complete. Achievement of Full Operation occurred on November 22, 2016.	No costs were incurred during the reporting period

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
22	Main Outfall Sewer Upgrades – Phase II	Additional soil will be added to the soil cap on the brick-arch portion of the MOI between the Bridge Section and the WPCS headworks, after the completion of, and subject to the results of, a geotechnical and engineering evaluation will be to determine the amount of additional soil cover, up to 2 feet, that can be placed on the remaining brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks without causing excessive settlement of that portion of the MOI. The parties understand that the City may eliminate and/or improve some of the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks project. Any improvements to the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks through construction of a proposed WPCS headworks project. Any improvements to the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks project shall ensure structural integrity such that the improved portion of the enclosed conduit of the MOI withstands at least 5 feet of surcharge.	<p>Completion of engineering evaluation: May 30, 2017</p> <p>Completion of placement of additional soil: November 30, 2017</p>	<p>Engineering evaluation completed and submitted to EPA on May 22, 2017.</p> <p>Achievement of Full Operation for the Soil Cap occurred on November 15, 2017.</p>	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
23	Main Outfall Sewer Inspection	Perform inspection and rehabilitation consistent with the Main Outfall Sewer Supplement to the Approved CMOM Program as outlined in Section VII of the Consent Decree	Full Operation shall be maintained consistent with Main Outfall Sewer Supplement to the Approved CMOM Program	Project complete.	No costs were incurred during the reporting period.

Table 2-3 Ohio Canal Interceptor Tunnel (OCIT) Flow Release Dates as of June 15, 2020

SEWER	FINAL RELEASE DATES	OVERALL	APRIL STORM	JULY STORM	AUGUST STORM
RACK 18	3/9/2020	28.81%	33.75%	26.68%	27.16%
RACK 19	4/16/2020	7.32%	5.98%	7.85%	7.83%
RACK 16 EAST	4/28/2020				
RACK 4	4/30/2020	2.71%	1.99%	3.03%	2.93%
RACK 17	5/5/2020	9.72%	8.33%	10.37%	10.11%
RACK 23	5/7/2020	0.35%	0.29%	0.37%	0.37%
RACK 37	5/13/2020	2.66%	2.52%	2.71%	2.70%
RACK 20	5/13/2020	0.47%	0.50%	0.46%	0.47%
RACK 38	5/21/2020				
RACK 16 WEST	5/29/2020	38.55%	31.89%	42.31%	39.75%
RACK 4 underflow	5/30/2020				
OCI	6/3/2020				
MARKET ST.	6/10/2020	1.43%	1.71%	1.23%	1.44%
RACK 24	6/13/2020	6.98%	12.27%	3.94%	6.11%
TOTAL		99.00%	99.23%	98.95%	98.87%

2.C Project Cost Incurred

Project costs incurred by the City during the reporting period for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update are provided in Table 2-2. The City incurred additional costs for regulatory support, design management, program controls, technical and right of way support, GI operation and maintenance and program management \$1,299,151.00 during the reporting period.

2.D Status of Implementation of the Post-Construction Monitoring Program

The Post-Construction Monitoring Program (PCMP) was submitted on August 15, 2010, and in the revised Long-Term Control Plan on February 29, 2011. In response to comments from U.S. EPA, the City submitted a revised Program on December 14, 2012. U.S. EPA has recently asked the City to update the PCMP to reflect the changes in control measures due to the First and Second Amendment of the Consent Decree. The City is in the process of updating the PCMP accordingly.

2.E Listing of All CSO Discharges

CSO discharges from each CSO Outfall for the period July 1, 2020 through December 31, 2020 are listed in Appendix B. The listing also provides data on the depth and duration of rainfall at each of the City's thirteen (13) rain gauges. Racks 8, 9, 25, 30, 31, 38 and 39 are not included in the table. Racks 13, 8, 25, 9 and 39 were separated on June 14, 2016, May 21, 2012, April 26, 2012, July 27, 2004 and August 18, 2000, respectively. Racks 5, 7, 21 and 36 were separated on October 13, 2017, October 3, 2017, July 18, 2017 and August 16, 2017, respectively. Rack 30 was separated on November 9, 2017. Racks 20 and 23 were tied into the OCIT and the discharge point eliminated on May 13, 2020 and May 7, 2020, respectively. Rack 31 discharges are included with Rack 40 (Cuyahoga Street Storage Facility). Rack 38 is a diversion chamber that routes flow within the combined sewer system.

2.F Status of Development of the Supplemental Compliance Plan

As of this reporting period, the Supplemental Compliance Plan is not required.

2.G Status of Public Participation Plan Implementation

The City of Akron continued its public participation program with regular updates to the AWR! Stakeholders Group, formally known as the Integrated Plan Stakeholder Group and as the CSO Community Action Group (CAG), prior to that. During the reporting period, the following IP Stakeholder group meeting was held:

- AWR! Stakeholders Meeting – August 2020
- AWR! Stakeholders Meeting – December 2020

The City's public participation efforts also included presentations made at the following events and public meetings during the reporting period:

- Hosted the Virtual Blue Heron Hangout (July-August 2020)
- Gorge Dam GLRI Grant Extravaganza (July 2020)
- Northside Monthly Progress Meeting (July 2020)

- AASEP Micro-Internships (July 2020)
- AASEP Think Tank to Shark Tank (July 2020)
- AASEP Virtual Closing Ceremony (August 2020)
- Northside Monthly Progress Meeting (August 2020)
- NEFCO – ERTAC Meeting (September 2000)
- Attended the Gorge Dam Stakeholders Meeting (September 2020)
- Northside Monthly Progress Meeting (September 2020)
- E3 Award Flag Raising Ceremony and WRF Tour (September 2020)
- Attended the Virtual E3 Award Ceremony (September 2020)
- Presented at Junior Leadership Akron (October 2020)
- AASEP Advisory Board Meeting (October 2020)
- Presented for the Mayor's Citizens Institute (October 2020)
- City of Akron Diversity and Inclusion Virtual Outreach Event (November 2020)
- Northside Monthly Progress Meeting (November 2020)
- Attended City of Akron Council Meeting (November 2020)
- Attended the Gorge Dam Stakeholders Meeting (December 2020)
- AASEP Virtual Winter STEM Fest (December 2020)
- Published several press releases and blogs (July-December 2020)

Copies of presentations and distributed materials are included in Appendix C.

The City of Akron has posted updated program information to the Akron Waterways Renewed (AWR!) website (www.akronwaterwaysrenewed.com). Figure 2-1 is a picture of the home page of the AWR! website.

The City of Akron has also established a Facebook page for the Akron Waterways Renewed! Program. The link for this page is www.facebook.com/akronwaterwaysrenewed. Figure 2-2 represents the Facebook page for the program.

A Twitter account has been established to communicate program updates and general interest topics. The account is @AkronWaterways. Instagram @AkronWaterwaysRenewed has allowed the program to share and showcase the many improvements that are a result of the projects and stakeholder collaborations. Figure 2-3 is a picture of the Twitter page for AWR!

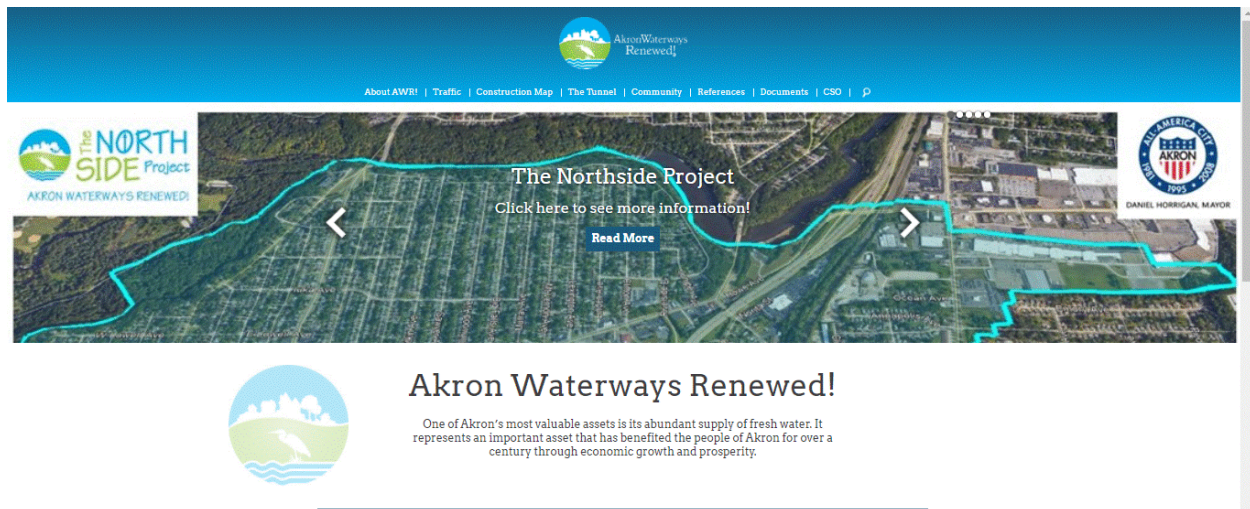


Figure 2-1 Akron Waterways Renewed Home Webpage

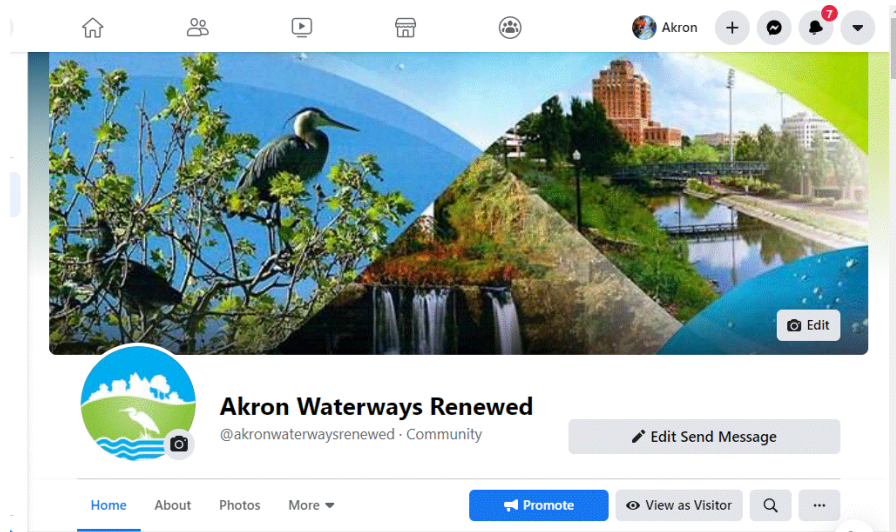


Figure 2-2 Akron Waterways Renewed Facebook Page



Figure 2-3 Akron Waterways Renewed Twitter Page

Section 3: CMOM, Grease Control, and Emergency Response Programs

3.A *List of all SSO and CSS Releases During Reporting Period*

Appendix D provides a list of SSOs and CSS Releases, including Building/Property Backups, during the reporting period.

3.B *System Inspection*

Table 3-1 provides the number of miles and percent of system inspected during the reporting period.

3.C *Manhole Inspection*

Table 3-2 provides the number and percent of manholes inspected during the reporting period.

3.D *System Cleaning*

The number of miles and percent of system cleaned during the reporting period is provided in Table 3-3.

3.E *List of Defects*

The comprehensive list of defects identified in Akron's system, and a list identifying acute defects, and a schedule to repair the defects (including date repaired if the defect has already been repaired) are included in Appendices E and F.

Table 3-1 System Inspection

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected
July 1 – December 31, 2020	89.99	10.74*	129.51	15.46*	129.51	15.46*	219.50	26.21*

*Based on 837.62 miles in system

Table 3-2 Manhole Inspection

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected
July 1 – December 31, 2020	3262	17.20**	2670 ^Δ	14.08**	2670 ^Δ	14.08**	5932	31.28**

**Based on 18,967 manholes in system

^ΔDue to a reporting error discovered during this reporting period, 56 manhole inspections were counted twice in the previous semiannual report. This table reflects the corrected count.

Table 3-3 System Cleaning

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned
July 1 – December 31, 2020	89.99	10.74*	129.51	15.46*	129.51	15.46*	219.50	26.21*

*Based on 837.62 miles in system

3.F Maintenance and Training Activities

- A. Pump station and force main preventive maintenance activities were conducted in accordance with Item 2.E of the approved CMOM program.
- B. 3,262 manholes were inspected during the period beginning July 1, 2020 through December 31, 2020, and 42 were documented to have signs of heavy infiltration. Those that are confirmed to be in need of repairs will be included in a future capital improvement plan.

Table 3-4 Manholes Documented with Heavy Infiltration

Manhole Asset ID	Location
294895	2303 Chatham Rd.
308512	683 Lauby Ave.
287807	2067 S. Hawkins Ave.
287753	1154 Battles Ave.
288146	W. Wilbeth @ 14th St. SW
288652	2119 13th St. SW
291700	2715 Nesmith Lake Blvd. (No Structure)
742057	32nd St. SW @ Fawler
287192	1451 W. Waterloo Rd.
297701	PPN 6859601
291771	2669 Nesmith Lake Blvd
303520	220 Wolf Ledges Pkwy
308255	On I-77 NB off ramp at E. Wilbeth Rd.
309095	PPN 6801941
311058	PPN 6755803
311059	PPN 6729742
311061	PPN 6717344
311267	PPN 6717344
310814	PPN 6825814
299281	693 Palisades Dr.
298655	765 Lafayette Dr.
303514	PPN 6716434
303412	PPN 6716434
303512	PPN 6716434
303715	Furnace St. Under Y-Bridge
290954	S. Firestone Blvd. @ Crescent Dr.
291389	1326 Brown St. (on Firestone Blvd.)
292096	PPN 6841473
291553	PPN 6852985
292125	PPN 6861076
299238	321 W. Exchange St.
291977	529 Grant St.
290464	PPN 43389545
290786	100 Rosa Parks Dr.
290414	PPN 6763927
289937	South St. @ Princeton
290173	Firestone Pkwy. @ W. Wilbeth Rd.

290184	1750 S. Main St.
290213	1700 Firestone Pkwy.
290160	PPN 6756536
290163	PPN 6756536
290232	1560 Firestone Pkwy.

C. The following sewer construction and rehabilitation projects were completed or are ongoing within the City of Akron during the reporting period:

a) Tallmadge Avenue (File 2010-035-00)

The project consists of roadway and utility improvements along East Tallmadge Ave including: Full Depth Asphalt Pavement reconstruction, concrete sidewalks and curb, sanitary and storm sewer reconstruction, water main and signal interconnect.

b) Ascot Parkway Improvements (File 2018-049-00)

This project consists of installing new full-depth asphalt pavement, sections of concrete curb, and spot repairing sections of storm and sanitary sewer, where recommended, from State Road to 4,600 feet west ending in a cul-de-sac.

c) Sanitary Sewer Reconstruction 2018 Small Diameter Lining (File 2017-017-00)

To rehabilitate the City's sanitary and combined sewer system, part of the City's annual sewer reconstruction program.

d) Sanitary Sewer Reconstruction 2018 Large Diameter Lining (File 2017-017-01)

To rehabilitate the City's sanitary and combined sewer system, part of the City's annual sewer reconstruction program.

e) Sevilla Trunk Sewer Reconstruction (File 2012-044-00)

The project consists of replacing the existing trunk sewer and the backup force main from the Mud Run Pump Station.

D. Root control program activities were conducted in accordance with Item 2.K of the approved CMOM program. As a component of the Accelerated Cleaning and Inspection Program, the Root List requires more frequent attention than the system wide maintenance activities. The City's approach is to inspect each of these root list locations on a modified schedule, and provide cleaning only when it is determined those pipes are in need of maintenance.

E. Training activities were conducted on the following topics. Date of training and number of employees receiving training are indicated in Table 3-5.

Table 3-5 Training Activities

Date	Course Title/Description	Number of Employees
7/14/2020	An Examination into Collection System Inspection Methods	2
7/22/2020	Operation of Chemical and Biological Phosphorus Removal with considerations for Combined Nitrogen and Phosphorus Removal System	1
5/4/2020	Operation of Anaerobic Digesters	2
8/20/2020	Understanding the Role of Hazard Communication in 2020	1
9/1/2020	What have your bugs done for you lately?	1
9/15/2020	Heart saver Training	4
9/22/2020	Proactive Planning for Ventilation and Odor Control of a Large Diameter Tunnel System	1
9/28/2020, 10/30/2020	New Employee Training	3
9/29/2020	Heat Stress? Cold Stress? You've got to love Ohio, right?	1
10/6/2020	NPDES Permit, New and Proposed Rules and Policies	3
10/6/2020	Storm Water Permitting Requirements for Industrial Activity	2
10/13/2020	Virtual Excavation Safety for Competent Persons	1
10/21/2020	Aging Infrastructure: The Danger Brewing Right Under our Feet	1
10/27/2020, 11/3/2020	IDDE, SWP3, and Near Miss Program	15
10/30/2020	Excavating and Trenching Safety	2
11/10/2020	One Water: Our Water, Your Water	2

3.G Grease Control Program

In accordance with Grease Control provisions in the approved CMOM program, this program includes inspection and/or cleaning of the known FOG trouble locations, part of the Accelerated Cleaning and Inspection Program, on what was previously called the “Speed Rodder List.”

3.G.1 List of SSO and CSS Releases Caused by Fats, Oils, and Grease (FOG)

Table 3-6 Releases Caused by Fats, Oils and Grease

Date	Location	Type of Release (SSO, Rack, Property Backup)	Add to FOG Trouble Spot List
7/6/20	1026 Haynes	Property Backup	Yes

3.G.2 List of FOG Locations

A complete list of FOG Locations inspected and/or cleaned during the reporting period is included in Appendix G.

As stated in previous Semi-Annual Reports, to optimize the current schedule for the cleaning of locations suspected to have recurring grease accumulation, in 2013, the City began the CCTV inspection of each grease location on or around the next scheduled cleaning cycle to determine if significant grease accumulation has occurred. Based on the findings of the CCTV inspection, the frequency of cleaning at each grease location is adjusted accordingly. With the improvements initiated to control FOG at the source, it is anticipated that scheduled cleaning will be less efficient than periodic inspection, and cleaning only when needed.

3.G.3 FOG Education Efforts Undertaken During Reporting Period

The following educational efforts were undertaken and completed during the reporting period:

- A. The City of Akron developed a website (<https://www.akronohio.gov/>) which includes a FOG page (<https://www.akronohio.gov/cms/site/FOG/index.html>) identifying the effects of fats, oils, and grease discharged into the sewer system and things property owners can do to prevent aforementioned discharges.
- B. Akron Waterways Renewed Team developed a Program website (<http://akronwaterwaysrenewed.com>) which includes a link to the City’s educational FOG brochure, among the topics covered was that of the proper handling of fats, oils, and grease.

3.H Green Infrastructure Performance Reporting

Green Infrastructure Performance Reporting can be found in Appendix H.

Section 4: Mud Run Pump Station

4.A Status of Mud Run Study and Report of Findings

Status of Study and Report of Findings	No activity during this reporting period. The Report of Findings was submitted to USEPA on January 15, 2012.
Date of Report Completion	No activity during this reporting period. Report of Findings submitted on January 15, 2012, per the Consent Decree.
Project Cost Incurred During Reporting Period	Report complete. No costs incurred during the reporting period.

4.B Status of Mud Run Pump Station Remedial Report

Status of Remedial Report	The Remedial Report is complete.
Date of Report Completion	The Remedial Report was completed on October 15, 2012. Additional comments were received after completion and were included in the revised Remedial Report submitted on August 13, 2013. Final written approval dated February 26, 2014 was received via email on March 3, 2014.
Project Cost Incurred During Reporting Period	Report complete. No costs incurred during the reporting period.

4.C Status of Mud Run Pump Station Design and Construction of Projects

Projects Status	Table 4-1 shows the current status of the Mud Run Pump Station design projects. Table 4-2 shows the current status of the Mud Run Pump Station construction projects.
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**Table 4-1 Status of Mud Run Pump Station
Design Projects**

Project	Status
Mud Run Trunk Sewer Lining	Design complete
Sevilla Trunk Sewer Reconstruction	Design complete
Mud Run Pump Station Improvements	Design complete
Mud Run Storage Basin Improvements	Design complete
Mud Run District Capacity Improvements	Design complete
Mud Run District Infiltration/Inflow Improvements	Design complete

**Table 4-2 Status of Mud Run Pump Station
Construction Projects**

Project	Status
Mud Run Trunk Sewer Lining	Construction is 100% complete
Sevilla Trunk Sewer Reconstruction	Construction began April 16, 2019
Mud Run Pump Station and Storage Basin Improvements***	Construction is 100% complete
Mud Run District Capacity Improvements***	Construction is 100% complete
Mud Run District I/I Repairs	Construction is 100% complete
Mud Run District I/I Rehabilitation	Construction is 100% complete
NOTE: *** projects indicate those required for CD compliance.	

Construction of the Mud Run Pump Station and Storage Basin is complete.

Mud Run District I/I Repairs is complete.

Mud Run District I/I Rehabilitation is complete.

The Mud Run District Capacity Improvements project is complete.

**Anticipated Date
of Report
Completion**

The Report of Findings was completed on January 15, 2012. The Remedial Report was submitted on August 13, 2013. Approval of the Remedial Report was issued on February 26, 2014. On October 31, 2014, a letter was issued by USEPA that agrees to extend the October 15, 2015 construction deadline set forth in paragraph 25 of the Consent Decree to January 8, 2016 in order to construct and achieve full operation of the projects approved under the Mud Run Pump Station Remedial Report. The projects marked with *** will require an Achievement of Full Operation date of January 8, 2016 to be in compliance with the Consent Decree. The other projects are not required to be completed by January 8, 2016 since the anticipated I/I reductions were not used in determining the required storage basin capacity to meet the Consent Decree requirements.

**Project Cost
Incurred During
Reporting Period**

Mud Run District Capacity Improvements - Project complete
Mud Run Pump Station & Storage Basin - Project complete
Mud Run District I/I Repairs - Project complete
Mud Run District I/I Rehabilitation - Project complete
Sevilla Trunk Sewer Reconstruction - \$1,329,908.27

Section 5: Supplemental Environmental Project

The City's third and final payment to the Supplemental Environmental Project (SEP) escrow account was made during the January – July 2011 reporting period. At the request of the State of Ohio, the City transferred the funds in the SEP escrow account (\$905,972.49) to the Friends of the Crooked River, via wire transfer. The wire transfer occurred on October 13, 2017, and the State of Ohio was provided with confirmation of the wire transfer. The City is not required to do anything further regarding the SEP.

Section 6: Other Necessary Information

On October 31, 2014, U.S. EPA and Ohio EPA approved the City's request to remove certain manholes and sewer segments from the City's CMOM inspection and cleaning program. The list included three sewer segments that are tributary to the Ohio Canal Interceptor, and were scheduled to be abandoned at the time that the OCIT becomes operational. (Subsequent to receiving the October 31, 2014 letter, the City renumbered segment ID 367480 to 755830.) Page 3 of the letter includes the following provision related to the three specific sewer segments that are tributary to the Ohio Canal Interceptor:

If the City chooses not to abandon or eliminate these sewers by December 31, 2018, you must notify EPA and OEPA of this decision in writing, and you will have to inspect, clean, provide a conditional assessment and correct deficiencies in compliance with Attachment C, Section 2 of the CD no later than April 30, 2019.

The City was unable to abandon these lines until the OCIT project had been completed and the tunnel became operational. The City submitted its original request to remove these segments from the CMOM inspection and cleaning cycle because these segments carry high velocity flows that prevent the City from inspecting and cleaning the segments. Due to the high velocity flows, it is believed that these sewer segments are self-cleaning.

The City determined to abandon two of these segments at the time the OCIT tunnel became fully operational on June 13, 2020. Segment 368243 will not be abandoned. On August 3, 2020, the segment was inspected and defects to the invert of the brick sewer were identified. As a result of the inspection that City was able to confirm that this segment was self-cleaning due to the high velocity flows. As a result, no additional cleaning was required for this segment. Invert repairs were made on September 24, 2020 and the segment was reinspected on September 29, 2020. This segment is schedule for CIPP lining rehabilitation in February 2021.