

April 30, 2021

Massachusetts Department of Environmental Protection  
Bureau of Resource Protection  
Western Regional Office  
436 Dwight Street  
Springfield, Massachusetts 01103

and

U.S. Environmental Protection Agency  
Office of Environmental Stewardship (OES)  
Water Technical Unit  
5 Post Office Square, Suite 100 (OES-SMR)  
Boston, Massachusetts 02109-3912

Subject: Combined Sewer Overflow Annual Report and Operation and Maintenance of the  
Sewer System Annual Report for Year 2020  
City of Holyoke, Massachusetts

Dear Sir or Madam:

This letter has been prepared on behalf of Suez and the City of Holyoke (City) to serve as the 2020 Combined Sewer Overflow (CSO) Annual Report and Operation and Maintenance (O&M) of the Sewer System Annual Report. The annual reports are a requirement of the City of Holyoke's National Pollutant Discharge Elimination System (NPDES) permit (No. MA0101630, effective January 1, 2017). This 2020 Annual Report summarizes activities during the previous calendar year relating to compliance with the Nine Minimum Controls (NMC):

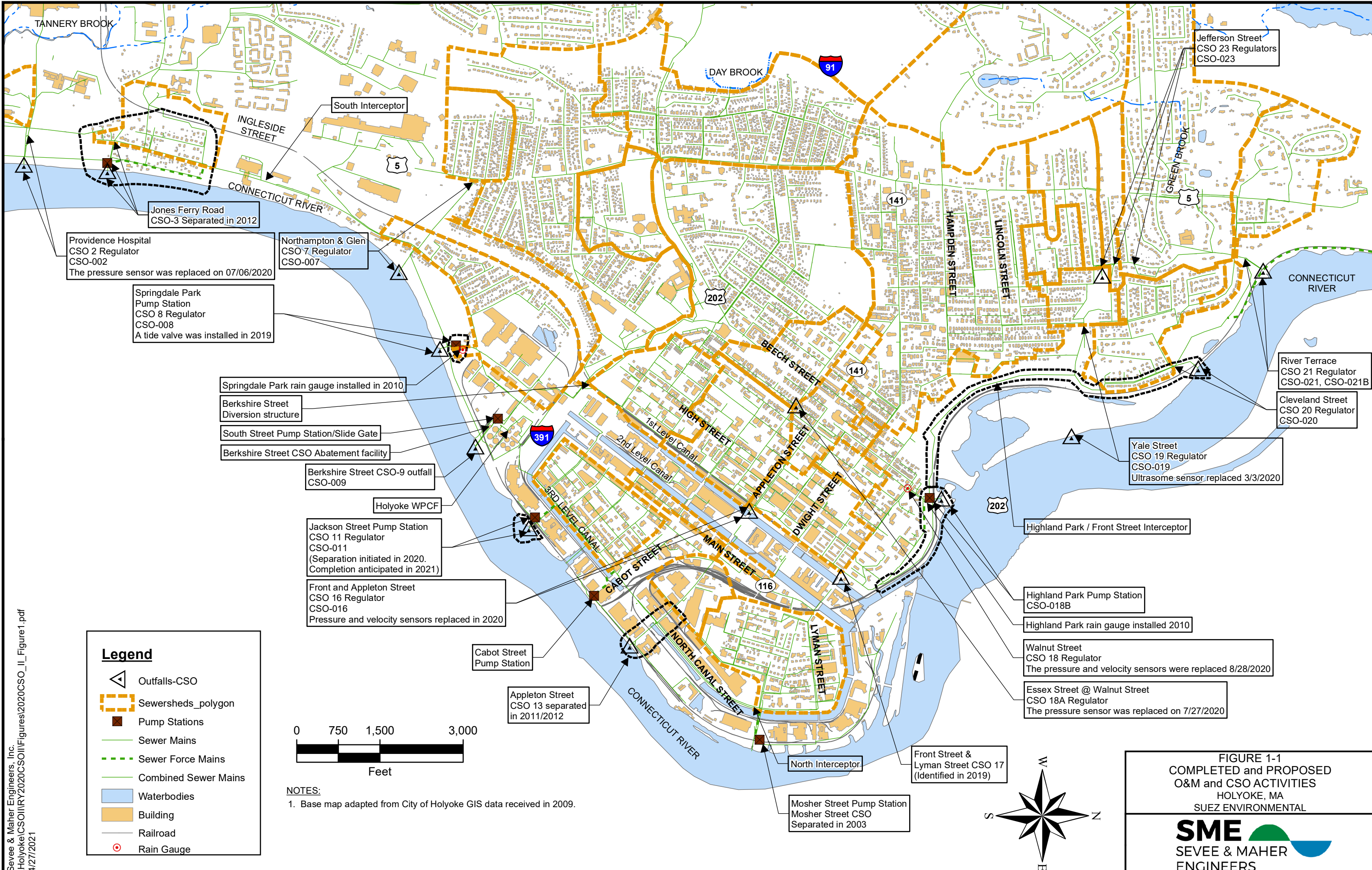
- (1) Proper operation and regular maintenance programs for the sewer system and the combined sewer overflows;
- (2) Maximum use of the collection system for storage;
- (3) Review and modification of the pretreatment program to assure CSO impacts are minimized;
- (4) Maximization of flow to the POTW for treatment;
- (5) Prohibition of dry weather overflows from CSOs;
- (6) Control of solid and floatable materials in CSOs;

- (7) Pollution prevention programs that focus on contaminant reduction activities;
- (8) Public notification to ensure that the public receives adequate notification of CSO occurrences and impacts; and
- (9) Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

For background information and details of the City's CSO system, please refer to the following City of Holyoke documents:

- *"Combined Sewer Overflow Monitoring Plan and Inflow/Infiltration Control Plan"*, prepared by Sevee & Maher Engineers, Inc. (SME) dated February 2010 (Revised September 2010);
- *"2009 Annual Report for Combined Sewer Overflow and Infiltration / Inflow"*, prepared by SME, dated April 2010 (Revised September 2010);
- *"2010 Annual Report for Combined Sewer Overflow and Infiltration / Inflow,"* prepared by SME, dated April 2011;
- *"2011 Annual Report for Combined Sewer Overflow and Infiltration / Inflow,"* prepared by SME, dated April 2012;
- *"2012 Annual Report for Combined Sewer Overflow and Infiltration / Inflow,"* prepared by SME, dated March 2013;
- *"2013 Annual Report for Combined Sewer Overflow and Infiltration / Inflow,"* prepared by SME, dated March 2014;
- *"Combined Sewer Annual Report and Infiltration / Inflow Annual Report for year 2014,"* prepared by SME, dated March 2015;
- *"Combined Sewer Annual Report and Infiltration / Inflow Annual Report for year 2015,"* prepared by SME, dated March 2016;
- *"Combined Sewer Overflow Annual Report and Operation and Maintenance of the Sewer System Annual Report for Year 2016,"* prepared by SME, dated April 2017;
- *"Combined Sewer Overflow Annual Report and Operation and Maintenance of the Sewer System Annual Report for Year 2017,"* prepared by SME, dated April 2018;
- *"Combined Sewer Overflow Annual Report and Operation and Maintenance of the Sewer System Annual Report for Year 2018,"* prepared by SME, dated April 2019; and
- *"Combined Sewer Overflow Annual Report and Operation and Maintenance of the Sewer System Annual Report for Year 2020"*, prepared by SME dated April 2020.

The location of CSO pump stations, regulators, and outfall locations are shown on Figure 1-1.



Providence Hospital  
CSO 2 Regulator  
CSO-002  
The pressure sensor was replaced on 07/06/2020

Springdale Park  
Pump Station  
CSO 8 Regulator  
CSO-008  
A tide valve was installed in 2019

Springdale Park rain gauge installed in 2010

Berkshire Street  
Diversion structure

South Street Pump Station/Slide Gate

Berkshire Street CSO Abatement facility

Berkshire Street CSO-9 outfall  
CSO-009

Holyoke WPCF

Jackson Street Pump Station  
CSO 11 Regulator  
CSO-011  
(Separation initiated in 2020.  
Completion anticipated in 2021)

Front and Appleton Street  
CSO 16 Regulator  
CSO-016  
Pressure and velocity sensors replaced in 2020

Cabot Street  
Pump Station

Appleton Street  
CSO 13 separated  
in 2011/2012

Mosher Street Pump Station  
Mosher Street CSO  
Separated in 2003

Front Street &  
Lyman Street CSO 17  
(Identified in 2019)

Walnut Street  
CSO 18 Regulator  
The pressure and velocity sensors were replaced 8/28/2020

Essex Street @ Walnut Street  
CSO 18A Regulator  
The pressure sensor was replaced on 7/27/2020

Highland Park / Front Street Interceptor

Highland Park Pump Station  
CSO-018B

Highland Park rain gauge installed 2010

Yale Street  
CSO 19 Regulator  
CSO-019  
Ultrasome sensor replaced 3/3/2020

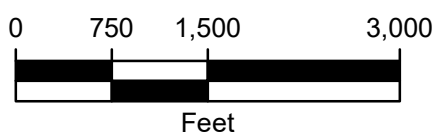
River Terrace  
CSO 21 Regulator  
CSO-021, CSO-021B

Cleveland Street  
CSO 20 Regulator  
CSO-020

Jefferson Street  
CSO 23 Regulators  
CSO-023

**Legend**

- Outfalls-CSO
- Sewersheds\_polygon
- Pump Stations
- Sewer Mains
- Sewer Force Mains
- Combined Sewer Mains
- Waterbodies
- Building
- Railroad
- Rain Gauge



NOTES:  
1. Base map adapted from City of Holyoke GIS data received in 2009.

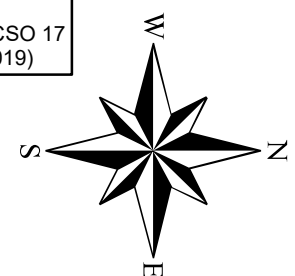


FIGURE 1-1  
COMPLETED and PROPOSED  
O&M and CSO ACTIVITIES  
HOLYOKE, MA  
SUEZ ENVIRONMENTAL



## **1.0 EVALUATION OF APPROVED NMC PROGRAM**

In 2020, the City and Suez have complied with the Minimum Implementation Levels of the NMCs as documented in the NPDES permit and further described in the WPCF's Combined Sewer Overflow Monitoring Plan and Inflow/Infiltration Control Plan (the O&M Plan).

NMC #1, 2, and 4, Inspection and Maintenance: Each CSO structure/regulator and pumping station has been routinely inspected as certified in Section 2.7. Detail regarding improvements to the City's wastewater collection system are provided in City's Long Term Control Plan (LTCP).

NMC #3, 6, and 7: There were no discharges to the combined system of septage, holding tank wastes, or other material which caused a visible oil sheen or contained floatable material during wet weather when CSO discharges may have been active. Significant Industrial Users met all pretreatment program requirements in 2020.

NMC #5: Dry weather overflows are prohibited and are reported if they occur. The City and Suez have reviewed the monitoring data and found three dry weather overflows in 2020, described in Section 2.4.

NMC #8: Signs at outfalls are routinely inspected and maintained in accordance with the Public Information program described in the O&M Plan. The Department of Public Works website provides additional resources for stormwater pollution prevention and outreach education.

NMC #9: During 2010, the City/Suez implemented CSO monitoring improvements that included installation of instruments for remote flow monitoring and precipitation data collection as documented in Section 2.1 below. These improvements allow the City/Suez to quantify and record all discharges from combined sewer outfalls.

The remote flow monitoring and precipitation data collection system is routinely serviced through the year. In 2020, pressure sensors were replaced at the Providence Hospital CSO (002), Appleton CSO (016), Essex CSO (018A), Walnut Street (018), and River Terrace CSO (021B). The ultrasonic sensor at the Yale Street CSO (019) was replaced. Velocity sensors at the Appleton CSO (016) and Walnut Street CSO (018) were also replaced. Additional improvements to the electronic monitoring system by Suez and Flow Assessment are anticipated in 2021.

In 2018, the City identified an additional CSO (017), located at the Front Street/Lyman Street intersection. A woodblock and remote flow monitoring equipment were installed on October 17, 2018. Electronic monitoring equipment was removed on February 27, 2020. No activations were recorded during that time period. A woodblock is still in place to detect activations. No activations were identified in 2020.

## **2.0 COMBINED SEWER OVERFLOWS (CSOs)**

### **2.1 CSO Overflow Measurement**

The City/Suez operations staff monitor overflow occurrences at CSO locations through woodblock observations approximately three times per week and after every rain event measuring at least 0.4-inches. The operations staff record whether the woodblock is still in-place since the last inspection (i.e., no overflow has occurred since the last inspection), if there is an active overflow occurring, or if there is no active overflow but the woodblock has been displaced from its location (i.e., an overflow has caused the woodblock to be moved since the last inspection). If the woodblock has moved since the last inspection, rainfall data, records of overflows that occurred at other locations, and analysis of CSO instrumentation data are used to estimate what time the CSO activation occurred.

Beginning in 2008, the City/Suez initiated work to automate CSO overflow monitoring and data collection to allow for continuous monitoring of event occurrences, flow volumes, and overflow duration at each CSO. As a result, remote flow monitoring stations with remote flow pressure sensors (installed June 2009), along with either area velocity flow meters (installed February 2010) or ultrasonic meters (Installed November and December 2014) now exist at each CSO location. CSOs 002, 008, 011, 016, 018, and 023 are equipped with an area velocity sensor on the overflow line and a pressure sensor to identify CSO activation. CSOs 007, 018A, 018B, 019, 021, and 021B are equipped with a pressure sensor and a backup ultrasonic meter. CSO 020 is equipped with a pressure sensor, area velocity meter, and backup ultrasonic meter. In conjunction with the remote monitoring instrumentation, the construction of a sharp crested weir (from 4 to 6 inches high) or a weir extension for existing diversion walls was completed in each overflow pipeline at all electronically monitored CSOs. The weir wall crest elevations at these locations were increased to minimize the occurrence of overflows.

Flow Assessment installed a new weir on CSO 21, relocating the baffle and sensors and resurveying the chamber to improve flow measurement on December 6, 2018.

Flow Assessment routinely services all electronic CSO monitors in the City. Corrective actions performed in 2020 include replacement of sensors, batteries, meter cables, and an antenna.

### **2.2 2020 CSO Overflows**

The data from the remote monitoring was analyzed with precipitation data from one of several rain gauges. The rain gauge used for each CSO was based on proximity in accordance with NMC #9. Overflows for each CSO were compared to the corresponding rain events. The smallest and least intense rain events to result in overflows are reported for each CSO to identify areas where improvements will have the greatest impact. A report for each CSO, detailing overflow events and associated rain data from the Smith's Ferry rain gauge for 2020, is included in Attachment 1. The reports include CSO events that occurred continuously over multiple days and multiple events within a single day. A summary of the overflow data is provided in Table 2-1 and Table 2-2 summarizes the annual CSO discharge for the City on a daily basis.

**TABLE 2-1  
2020 CSO OVERFLOWS (WOODBLOCK AND INSTRUMENT-BASED DATA)**

Location	CSO No.	Overflows Based on Woodblock Observations	Overflows based on Instrumentation		Lowest Intensity Storm Causing Overflow		Smallest Storm Causing Overflow		Raingauges associated with storm intensity and depth
			No. of Days with Duration >= 5 minutes	No. of Days Resulting in Measurable Discharge (>1,000 gallons)	Date	Intensity (in/hr)	Date	Total Rainfall (in)	
Providence Hospital	002	24	21	19	12/11	0.05	12/11	0.05	Springdale Park and Smith's Ferry
Northampton and Glen	007	27	18	17	9/30	0.04	9/30	0.04	Springdale Park and Smith's Ferry
Springdale Park	008	25	42	42	9/30	0.04	9/30	0.04	Springdale Park and Smith's Ferry
Berkshire Street	009	40	29	29	7/14	0.01	6/29	0.40	WPCF and Springdale Park
Jackson Street	011	27	50	48	9/30	0.04	9/30	0.04	Springdale Park and Smith's Ferry
Front and Appleton	016	25	66	53	10/20	0.01	10/20	0.01	Highland Park and Smith's Ferry
Walnut Street	018	53	53	47	7/10	0.03	7/10	0.03	Highland Park and Smith's Ferry
Lyman Street	017	0	-	-	-	-	-	-	Smith's Ferry
Essex @ Walnut	018A	46	13	12	9/9	0.01	9/9	0.01	Highland Park and Smith's Ferry
Highland Park	018B	37	48	47	9/30	0.04	7/29	0.01	Highland Park and Smith's Ferry
Yale Street	019	24	19	14	9/30	0.04	9/30	0.04	Highland Park and Smith's Ferry
Cleveland Street	020	58	70	64	12/1	0.01	12/1	0.01	Highland Park and Smith's Ferry
River Terrace	021	35	44	41	7/10	0.03	7/10	0.03	Highland Park and Smith's Ferry
River Terrace B	021B	45	46	43	9/30	0.04	9/30	0.04	Highland Park and Smith's Ferry
Jefferson Street	023	25	35	24	9/30	0.04	9/30	0.04	Highland Park and Smith's Ferry
<b>Total CSO Occurrences</b>		<b>491</b>	<b>554</b>	<b>500</b>					

Storm Events	Holyoke WPCF Rain Gauge <sup>(1)</sup>	Springdale Park Rain Gauge	Highland Park Rain Gauge	Smith's Ferry Rain Gauge
Events > 1.0 " of rain	13	10	9	11
Events 0.5 to 1.0 " of rain	19	18	16	17
Events 0.25" to 0.5" of rain	26	16	12	19
Events 0.1" to 0.25" of rain	22	24	24	28
Less than 0.1 " of rain	46	96	147	61
<b>Total Storm Events</b>	<b>126</b>	<b>164</b>	<b>208</b>	<b>136</b>
<b>Total Precipitation (inches)</b>	<b>49.84</b>	<b>42.64</b>	<b>39.31</b>	<b>44.55</b>

**Note:**

1. Rain events at the WPCF were identified on a daily basis. Any storm event that spanned multiple days would be counted as multiple events.
2. The Jones Ferry CSO (CSO-003) and Appleton Street CSO (CSO-013) were separated in 2012.

**TABLE 2-2  
HOLYOKE ANNUAL CSO DISCHARGE SUMMARY  
FOR CY 2020**

Holyoke CSO Regulator # & Name	Receiving Water	Frequency A Days of <u>Untreated</u> Discharges/year WOOD BLOCK TEST	Frequency B Days of <u>Untreated</u> Discharges/year METER (any recorded event with flow)	Volume <u>Untreated</u> Discharge Gallons/year, or MG /year	Method of <i>estimating Volume</i> (Meter, Model, etc)
# 02 Providence Hospital	CT River	24	22	0.18	Meter
#07 Northamp/ Glen St.	CT River	27	19	0.22	Meter
#08 Springdale Park PS	CT River	25	43	21.4	Meter
#09 Berkshire Street	CT River	40	6	38.4	Meter
#11 Jackson Street PS	CT River	27	52	6.31	Meter
# 16 Front/Appleton St (In Front St Interceptor)	First Lvl Canal, then CT River	25	67	1.76	Meter
# 17 Front/Lyman St	CT River	0	-	0	Woodblock
# 18A Essex/Walnut	CT River	46	14	0.25	Meter
# 18 Walnut Street, prior to Interceptor	CT River	53	54	11.8	Meter
#18 B Highland PS High Outlet Overflow	CT River	37	49	10.8	Meter
# 19 Yale St	CT River	24	19	0.07	Meter
# 20 Cleveland St	CT River	58	71	9.70	Meter
# 21 River Terrace	CT River	35	45	7.05	Meter
# 21 B River Terrace B	CT River	45	47	17.5	Meter
# 23 Jefferson St	Dry Dingle	25	36	0.93	Meter
<b>City Cumulative</b> Frequency and Volume of CSO Discharge		491	544	126	

**HOLYOKE CSO DISCHARGE SUMMARY BY MONTH, CY 2020**

Month	Monthly Rainfall Inches (WPCF Rain Gauge)	Monthly Total <u>Untreated</u> CSO Volume Discharged from all CSO's excluding Berkshire Street (CSO- 009) (MG/month)	Monthly Total <u>Untreated</u> CSO Volume Discharged from Berkshire Street CSO Facility (CSO-009) (MG/month)	Monthly Total <u>Treated</u> CSO Volume Discharged from Berkshire Street CSO Facility (CSO-009) (MG/month)
January	1.48	2.74	0	5.67
February	3.98	2.03	0	4.30
March	3.80	3.30	0	2.73
April	5.13	7.24	0	11.7
May	2.82	4.26	2.06	8.78
June	2.72	4.28	0	2.96
July	4.13	12.3	6.44	3.77
August	3.33	3.83	4.32	1.01
September	3.46	9.90	17.6	7.00
October	6.01	5.29	0	12.3
November	5.12	14.1	7.90	18.0
December	7.86	18.7	0	25.9
<b>TOTAL:</b>	49.8	88.0	38.4	104

### 2.3 Berkshire Street CSO 9 Facility

The Berkshire Street CSO Treatment Facility continues to capture the majority of CSO 009 regulator overflows. The Berkshire CSO Report, provided in Attachment 2, details the daily activity at this CSO in 2020. The following is a summary of significant occurrences:

- During 2020, there were 127 discrete storm events that had measurable rainfall totaling approximately 49.8 inches, close to the 49-inch average annual rainfall measured by the WPCF rain gauge since it was installed in 2010. The rainfall volume and intensity during 99 of the 2020 storm events did not result in a combined sewer flow discharge to the CSO 009 facility.
- There were 28 events in 2020 that resulted in activations (i.e., flow recorded to the CSO 9 facility). The total volume of flow to the CSO 009 facility was 183 million gallons (MG) in 2020, significantly less than the 277 MG to CSO 009 in 2018.
- Of the CSO 009 activations in 2020, 40.5 MG of the 183 MG discharged to the CSO 009 facility were captured within the CSO 009 facility storage basin(s) and returned to the WPCF for secondary treatment.
- In 2020, there were 28 events that caused combined sewer flow to exceed the storage tank volume. Excess flows from these events were disinfected and discharged. The approximate volume that discharged through the basins was 104 MG in 2020.
- Six storm events in 2020 were significant enough that overflows occurred without treatment. The total annual volume of CSO that went untreated was 38 MG in 2020. The smallest rainfall event leading to an overflow without treatment was approximately 0.95 inches on September 29, 2020 and 0.54 inches on September 30, 2020. The WPCF rainfall gauge records daily precipitation observations, so the hourly intensity of the rainfall at the WPCF could not be determined by that gauge. Rain gauges throughout the City indicate that the rainfall event that caused the overflow occurred in the afternoon of September 29 with 0.51-1.86 inches of rainfall in approximately 25 minutes. The Highland, Springdale, and Smith's Ferry rain gauges observed peak hourly rainfall of 0.4, 0.3, and 0.54 inches, respectively.

### 2.4 Dry Weather Overflows

Three dry weather overflows occurred in 2020. All three events were reported verbally to the Massachusetts Department of Environmental Protection (MassDEP) within 24 hours of identification and in writing within 5 days.

On May 20, 2020, Suez identified high flow into the Springdale Park pump station at 2:15 PM. Suez shut the CSO 008 river gate to reduce the discharge volume and used the flood station as storage capacity until the discharge ceased. Suez identified the discharge source as the Berkshire Street Pond. The pond was formerly an industrial pond installed in the late 1800's and tied into sewer in 1955. There was a board barrier at the pond outlet where it connects to the collection system. The pond is now on residential property and the homeowner removed the barrier to lower the pond level. Suez put the



board back in place to stop the discharge. The pump station returned to normal operating conditions by 3:15 PM. Approximately 5,292 gallons discharged from the Springdale Park CSO (008).

On September 23, 2020 between 8:05 AM and 11:05 AM, Holyoke Water Works flushed fire hydrants in the Cleveland Street catchment area (CSO 020). This caused the Highland Interceptor to surcharge and CSO 20 to discharge an estimated 87,844 gallons. The discharge stopped once the hydrants were shut. The overflow was identified by the electronic meters and woodblock.

On October 14, 2020 a 12-inch water main broke on Central Park Drive. Holyoke Water Works isolated and shut down the affected main within 35 minutes. Approximately 111,584 gallons discharged from the Cleveland Street CSO (020), River Terrace CSO (021) and River Terrace B CSO (021B).

## 2.5 Inspections

Each of the City's CSO structures/regulators and pumping stations are routinely inspected, at a minimum of twice per week to ensure they are in good working condition, and are adjusted as needed to minimize combined sewer discharges and intrusion of flow due to high river stage. Inspection results are recorded and include: the date and time of the inspection, the general condition of the facility, and whether the facility is operating satisfactorily. If maintenance is necessary, the following is recorded: a description of the necessary maintenance, the date the necessary maintenance was performed, and whether the observed problem was corrected. All records of inspection are maintained for at least three years.

Suez and the City of Holyoke certify that the year 2020 inspections were conducted, results recorded, and records maintained. The following is a certification that inspections were completed for 2020, as required by the permit:

I certify to the best of my knowledge that; inspections of the Combined Sewer Overflow system structures, regulators, and pumping stations were conducted in 2020; that the results of the inspections were recorded, and the records are maintained.

Michael Williams  
Michael Williams  
Project Manager  
Suez

4/30/2021  
Date

### **3.0 OPERATION AND MAINTENANCE OF THE SEWER SYSTEM**

#### **3.1 Operations and Maintenance Staff**

Suez had 16 personnel in 2020 to complete the operation, maintenance, repair, and testing functions required to ensure compliance with terms and conditions of the NPDES permit in partnership with the City of Holyoke.

#### **3.2 Inspection and Maintenance Activities and Corrective Actions**

Routine maintenance activities related to the system were completed in accordance with the WPCF O&M plan throughout the City of Holyoke's CSO system.

Inspections identified an additional CSO (017), located at the Front Street/Lyman Street intersection. CSO 17 was incorporated into the CSO monitoring program as described in Section 1.0 of this Report.

Capacity, Management, Operations, and Maintenance Program. The City/Suez implemented the Capacity, Management, Operations, and Maintenance (CMOM) program that was developed in 2013.

In 2020, approximately 75,413 linear feet of sewer were cleaned via vacuuming and jetting. Approximately 1,751 linear feet of sewer were inspected by CCTV. Clean-outs were performed on 406 catch basins. All streets in the City were swept at least once, per the City's Small Municipal Separate Storm Sewer System (MS4) permit.

The Front Street Interceptor was cleaned out in 2020. Approximately 16 tons of material were removed. Additional clean outs were performed on the Allyn and Fairfield interceptors and associated lines.

I/I at Springdale Park and Jackson Street Pump Stations. Monitoring and field investigations have identified two primary sources of potential I/I at the Springdale Park and Jackson Street pump stations. In 2009, the City/Suez began a program at these locations to investigate the quantity and source of this extraneous water by televising a number of the toe drains related to the dikes and floodwalls in those areas and through inspections of the pump station structures. In 2011, the City/Suez determined river water likely back flows into the Springdale Park and Jackson Street pump stations when the river stage reached certain elevations. The City/Suez continues to evaluate cost-effective, practical solutions to prevent extraneous toe drain water from surcharging the weirs and entering the sanitary pump stations while allowing free discharge.

A tide valve was installed at the Springdale Park CSO (008) in 2019 to prevent river water from entering the combined system when the river level is high. No inflow to CSO 008 from high river conditions was identified in 2020.

The City is currently working to separate the Jackson Street CSO. The design for the separation was completed in 2019 and the City awarded the project bid in February 2020. Construction began in the summer of 2020. The City anticipates completion of the separation in 2021. Detail on CSO separation is provided in the City's LTCP.

### 3.3 Collection System Maintenance Expenditures

In 2020, \$400,703.33 was spent on collection system maintenance activities and corrective actions.

### 3.4 Investigations and Corrective Actions

The Holyoke collection system contains approximately 61 percent combined sewers with the quantity of extraneous clean water that enters the sewer system dominated by stormwater runoff during wet weather rather than groundwater infiltration. The City will continue to reduce inflow and infiltration where practical during implementation of the on-going streets improvement program and through mitigation efforts described in the City's LCTP. Where streets are scheduled to be reconstructed, existing underground utilities such as sewer, water, and, if existing, stormwater piping are separated, rehabilitated, or replaced.

As this improvement program continues, combined sewer system lines will continue to be replaced or separated and the volume of inflow and infiltration will be decreased.

A summary of the minimum, maximum, and average monthly flows to the WPCF and the total monthly rainfalls during 2020 is provided in Table 3-1.

**TABLE 3-1  
2020 WPCF FLOW AND RAINFALL SUMMARY**

Month	Monthly Rainfall <sup>1</sup>	Minimum Daily Flow <sup>2</sup>	Maximum Daily Flow <sup>2</sup>	Average Monthly Flow <sup>2</sup>
	(in)	(MGD)	(MGD)	(MGD)
January	1.48	6.2	10.7	7.4
February	3.98	5.4	13.8	7.5
March	3.80	6.2	13.7	7.8
April	5.13	6.7	14.7	8.8
May	2.82	5.3	15.2	7.3
June	2.72	4.9	8.7	5.7
July	4.13	5.1	8.5	6.0
August	3.33	5.2	8.2	5.9
September	3.46	4.8	10.6	5.7
October	6.01	4.6	14.6	6.7
November	5.12	5.0	12.8	6.3
December	7.86	6.0	18.0	8.4
<b>Average</b>	4.15	5.5	12.5	7.0

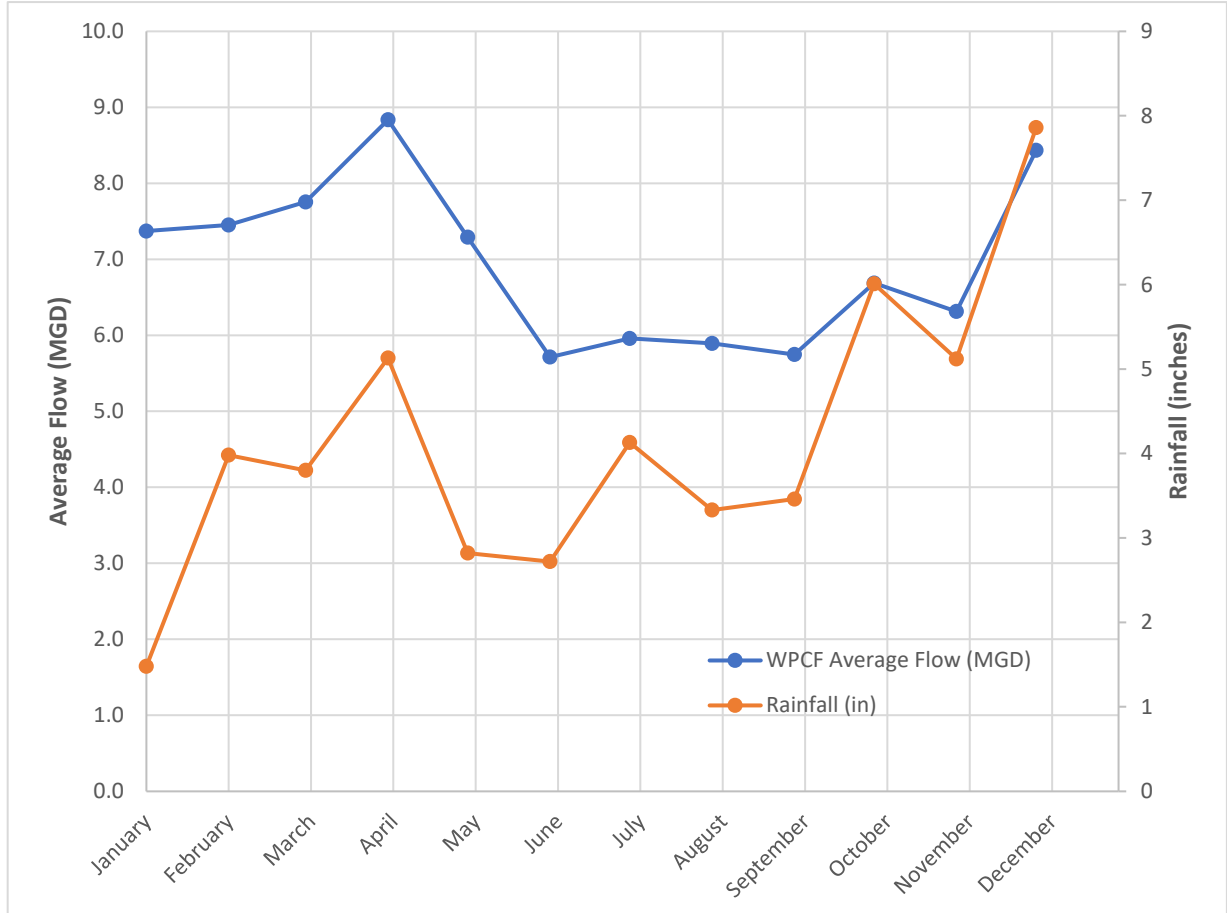
Notes:

1. Rainfall values observed at the WPCF rain gauge.
2. Based on total daily flow data.

The correlation between average monthly flows and monthly rainfall is represented in Figure 3-1. WPCF flow is typically highest during winter months. Higher amounts of rainfall and spring snow melt in April likely caused a high WPCF flow.

**FIGURE 3-1**

**2020 WPCF FLOW RELATIONSHIP TO RAINFALL**



Further analysis was conducted on the impact of each rain event on the WPCF flow. Rain events were separated into four ranges: greater than 1 inch; between 1 inch and 0.5 inch; between 0.5 inch and 0.1 inch; and less than 0.1 inch. The WPCF flow for the day of each event was averaged for the appropriate range. The results indicate a clear correlation between the rain events and WPCF flow, as shown in Table 3-2.

**TABLE 3-2**  
**2020 RAIN EVENT IMPACT ANALYSIS**

Rain Event Size	Average Daily WPCF Flow (MGD)
>1"	12.11
0.5"-1"	9.54
0.1"-0.5"	7.99
<0.1"	6.50
No Rain Event	6.34
<b>Note:</b>	
1. Did not include flow on days without any rain event.	

### 3.5 Assessment of WPCF Flow

A summary of the year 2020 daily totals, maximum flows, and minimum flows to the Holyoke WPCF is provided in Table 3-1. Table 3-1 shows the average daily flow for 2020 through the WPCF is 6.95 million gallons per day (MGD). The NPDES permit states that if the annual average flow exceeds 80 percent of the design flow or there have been capacity related overflows, then the City must calculate the volume of infiltration and inflow to the WPCF. The annual average plant flow (6.9 MGD) is below the 80 percent design flow threshold (80% of 17.5 MGD = 14 MGD). The Berkshire Street CSO Facility had overflows in 2020 related to the hydraulic limitations of the collection and treatment systems.

The majority of inflow in the City's wastewater collection system is stormwater. Based on Table 3-2, it is approximated that 6.34 MGD is the result of regular use and infiltration. Therefore, in 2020, inflow contributed approximately 0.61 MGD, 4.3 million gallons per week (MGW), and 18.5 million gallons per month (MGM) to the WPCF.

### 3.6 Unauthorized Discharges

Suez identified no unauthorized discharges in 2020.



If you have any questions, comments, or require more information, please feel free to contact Michael McManus at the City of Holyoke (413-322-5645), Michael Williams at Suez (413-478-5773) or me (207-829-5016).

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Daniel P. Diffin, P.E. Vice President/Civil Engineer

Attachments:

Attachment 1: CSO Overflow Reports

Attachment 2: Berkshire CSO Report

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**ATTACHMENT 1**

**CSO OVERFLOW REPORTS**



CSO 002  
2020 Activations

Holyoke, MA

CSO 002

Main Street at Lug Handle Road

2020 Overflow Summary (1/1/20 - 12/31/20)

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/25/2020 17:15	1/25/2020 19:50	155	0.76	0.26	11,316	0.011316
2	4/13/2020 14:30	4/13/2020 14:50	20	1.6	0.26	9,418	0.009418
3	4/21/2020 14:15	4/21/2020 14:25	10	0.48	0.34	3,198	0.003198
4	5/1/2020 0:50	5/1/2020 1:10	20	0.16	0.05	10,537	0.010537
5	5/15/2020 19:15	5/15/2020 19:30	15	0.41	0.33	8,694	0.008694
6	6/6/2020 13:25	6/6/2020 13:30	5	0.14	0.02	2,223	0.002223
7	6/28/2020 13:25	6/28/2020 13:30	5	0.85	0.38	2,140	0.002140
8	6/28/2020 14:35	6/28/2020 14:40	5	0.85	0.38	8,024	0.008024
9	6/29/2020 14:20	6/29/2020 14:35	15	0.9	0.83	18,615	0.018615
10	7/13/2020 12:20	7/13/2020 12:35	15	0.42	0.41	9,041	0.009041
11	7/22/2020 17:20	7/22/2020 20:50	210	0.51	0.33	23,268	0.023268
12	7/23/2020 14:25	7/23/2020 14:35	10	0.13	0.11	5,726	0.005726
13	7/29/2020 22:55	7/29/2020 23:00	5	0.1	0.1	6,585	0.006585
14	8/2/2020 14:05	8/2/2020 14:10	5	1.17	1.12	10,227	0.010227
15	8/17/2020 20:40	8/17/2020 20:45	5	0.51	0.5	678	0.000678
16	8/29/2020 6:40	8/29/2020 6:55	15	0.72	0.57	13,753	0.013753
17	9/10/2020 17:10	9/10/2020 17:15	5	0.01	0.01	6,789	0.006789
18	9/30/2020 0:05	9/30/2020 0:10	5	0.04	0.04	3,851	0.003851
19	11/30/2020 13:45	11/30/2020 15:15	90	2.45	0.54	14,350	0.014350
20	11/30/2020 16:25	11/30/2020 17:45	80	2.45	0.54	3,265	0.003265
21	11/30/2020 18:35	11/30/2020 20:40	125	2.45	0.54	5,146	0.005146
22	12/5/2020 11:30	12/5/2020 13:35	125	1.85	0.25	10	0.000010
23	12/11/2020 3:10	12/11/2020 4:00	50	0.09	0.05	1,404	0.001404
24	12/25/2020 3:45	12/25/2020 13:30	585	2.27	0.21	2,627	0.002627

Total Overflow (MG):

0.180885



CSO 007  
2020 Activations

Holyoke, MA

CSO 007

Glen Street and Northampton

2020 Overflow Summary (1/1/20 -12/31/20)

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/25/20 19:35	1/25/20 20:00	25	0.76	0.26	2,603	0.002603
2	4/13/20 14:30	4/13/20 15:50	80	1.6	0.26	3,063	0.003063
3	5/15/20 19:15	5/15/20 19:30	15	0.41	0.33	12,604	0.012604
4	6/6/20 13:00	6/6/20 13:35	35	0.14	0.02	17,844	0.017844
5	6/28/20 14:30	6/28/20 14:45	15	0.85	0.38	8,963	0.008963
6	6/29/20 14:15	6/29/20 14:30	15	0.9	0.83	2,170	0.002170
7	7/3/20 13:45	7/3/20 13:55	10	1.08	0.48	289	0.000289
8	7/14/20 11:40	7/14/20 11:50	10	0.55	0.54	1,555	0.001555
9	7/22/20 17:05	7/22/20 20:50	225	0.51	0.33	19,614	0.019614
10	7/29/20 22:50	7/29/20 23:05	15	0.1	0.1	6,199	0.006199
11	8/2/20 13:45	8/2/20 14:15	30	1.17	1.12	34,125	0.034125
12	8/17/20 20:30	8/17/20 20:45	15	0.51	0.5	4,941	0.004941
13	8/19/20 15:25	8/19/20 15:35	10	0.22	0.22	2,011	0.002011
14	8/29/20 6:50	8/29/20 7:00	10	0.72	0.57	1,462	0.001462
15	9/3/20 0:40	9/3/20 2:05	85	1.74	1.25	53,146	0.053146
16	9/30/20 0:05	9/30/20 0:25	20	0.04	0.04	8,410	0.008410
17	9/30/20 5:10	9/30/20 5:35	25	0.04	0.04	17,065	0.017065
18	11/30/20 13:40	11/30/20 19:20	340	2.45	0.54	27,010	0.027010
19	12/25/20 3:50	12/25/20 13:30	580	2.27	0.21	1,185	0.001185

Total Overflow (MG):

0.224259



CSO 008  
2020 Activations

Holyoke, MA

CSO 008

Springdale Park

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/25/2020 17:15	1/25/2020 20:25	190	0.76	0.26	857,063	0.857063
2	2/7/2020 11:25	2/7/2020 11:50	25	0.42	0.12	7,894	0.007894
3	2/27/2020 2:50	2/27/2020 8:00	310	0.94	0.18	304,782	0.304782
4	3/13/2020 6:05	3/13/2020 10:10	245	0.67	0.18	223,900	0.223900
5	3/19/2020 3:55	3/19/2020 7:20	205	0.79	0.2	313,204	0.313204
6	3/22/2020 10:20	3/22/2020 12:00	100	0.02	0.02	45,068	0.045068
7	3/24/2020 10:55	3/24/2020 11:45	50	0.53	0.22	114,124	0.114124
8	3/29/2020 5:40	3/29/2020 5:50	10	0.61	0.17	3,170	0.003170
9	3/29/2020 10:50	3/29/2020 11:25	35	0.61	0.17	41,556	0.041556
10	4/9/2020 12:20	4/9/2020 15:00	160	0.39	0.22	124,179	0.124179
11	4/13/2020 6:45	4/13/2020 18:50	725	1.6	0.26	939,111	0.939111
12	4/21/2020 13:40	4/21/2020 15:15	95	0.48	0.34	255,574	0.255574
13	4/30/2020 9:10	4/30/2020 23:55	885	0.27	0.07	314,628	0.314628
14	5/1/2020 0:00	5/1/2020 5:30	330	1.02	0.27	520,339	0.520339
15	5/1/2020 15:50	5/1/2020 17:05	75	1.02	0.27	41,735	0.041735
16	5/15/2020 19:15	5/15/2020 20:00	45	0.41	0.33	369,314	0.369314
17	5/20/2020 13:20	5/20/2020 13:40	20	0.02	0.01	5,292	0.005292
18	6/6/2020 13:00	6/6/2020 13:40	40	0.14	0.02	435,728	0.435728
19	6/11/2020 10:20	6/11/2020 10:35	15	0.24	0.19	15,156	0.015156
20	6/28/2020 13:25	6/28/2020 13:45	20	0.85	0.38	203,703	0.203703
21	6/28/2020 14:30	6/28/2020 15:00	30	0.85	0.38	242,232	0.242232
22	6/29/2020 14:10	6/29/2020 14:45	35	0.9	0.83	268,806	0.268806
23	7/3/2020 12:50	7/3/2020 14:25	95	1.08	0.48	564,919	0.564919
24	7/6/2020 19:25	7/6/2020 20:00	35	0.26	0.26	316,678	0.316678
25	7/14/2020 11:40	7/14/2020 12:10	30	0.55	0.54	264,515	0.264515
26	7/22/2020 17:10	7/22/2020 21:20	252	0.51	0.33	809,625	0.809625
27	7/29/2020 22:50	7/29/2020 23:20	30	0.1	0.1	229,030	0.229030
28	8/2/2020 13:45	8/2/2020 15:00	75	1.17	1.12	953,637	0.953637
29	8/4/2020 14:30	8/4/2020 14:45	15	0.28	0.16	16,607	0.016607
30	8/17/2020 20:30	8/17/2020 21:05	35	0.51	0.5	298,621	0.298621
31	8/19/2020 15:30	8/19/2020 15:50	20	0.22	0.22	197,101	0.197101
32	8/29/2020 6:45	8/29/2020 7:50	65	0.72	0.57	485,108	0.485108
33	9/3/2020 0:40	9/3/2020 3:05	145	1.74	1.25	1,618,709	1.618709
34	9/29/2020 23:45	9/30/2020 0:40	55	0.47	0.3	422,564	0.422564
35	9/30/2020 2:50	9/30/2020 6:00	190	0.04	0.04	641,480	0.641480
36	10/7/2020 16:30	10/7/2020 16:40	10	0.14	0.14	3,863	0.003863
37	10/13/2020 3:15	10/13/2020 14:50	695	0.22	0.11	457,929	0.457929



38	10/16/2020 13:50	10/16/2020 16:55	185	1.51	0.27	548,974	0.548974
39	10/16/2020 23:00	10/17/2020 4:15	315	1.51	0.27	296306	0.296306
40	10/29/2020 15:20	10/29/2020 17:09	106	1.1	0.22	166,871	0.166871
41	11/15/2020 20:30	11/15/2020 22:15	105	0.7	0.26	321,346	0.321346
42	11/23/2020 7:15	11/23/2020 10:45	210	0.43	0.24	417,279	0.417279
43	11/26/2020 6:20	11/26/2020 10:20	240	0.95	0.33	407,769	0.407769
44	11/30/2020 13:20	11/30/2020 21:00	460	2.45	0.54	2872293	2.872293
45	12/5/2020 6:45	12/5/2020 16:10	565	1.85	0.25	1,131,873	1.131873
46	12/25/2020 1:20	12/25/2020 10:35	555	2.27	0.21	1,560,457	1.560457
47	12/25/2020 11:40	12/25/2020 15:40	240	2.27	0.21	748,533	0.748533

Total Overflow (MG): 21.398645



CSO 011  
2020 Activations

Iolyoke, MA

CSO 011

Jackson Street

2020 Overflow Summary 1/1/20-6/30/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/25/20 17:15	1/25/2020 20:25	190	0.76	0.26	149,270	0.149270
2	2/7/20 11:20	2/7/2020 11:55	35	0.42	0.12	8,019	0.008019
3	2/27/2020 2:45	2/27/2020 8:00	315	0.94	0.18	64,434	0.064434
4	3/13/2020 6:05	3/13/2020 9:00	175	0.67	0.18	125,101	0.125101
5	3/19/2020 3:45	3/19/2020 7:30	225	0.79	0.2	392,352	0.392352
6	3/29/2020 10:45	3/29/2020 11:20	35	0.61	0.17	5,496	0.005496
7	3/30/2020 14:45	3/30/2020 14:50	5	0.1	0.06	3,576	0.003576
8	4/9/20 12:25	4/9/2020 14:45	140	0.39	0.22	79,567	0.079567
9	4/13/2020 6:50	4/13/2020 16:40	590	1.6	0.26	401,559	0.401559
10	4/15/20 8:10	4/15/2020 8:20	10	0.09	0.06	26,118	0.026118
11	4/21/2020 13:40	4/21/2020 15:25	105	0.48	0.34	62,279	0.062279
12	4/30/2020 9:15	4/30/2020 23:55	880	0.27	0.07	49,718	0.049718
13	5/1/2020 0:00	5/1/2020 2:40	160	1.02	0.27	285,597	0.285597
14	5/1/2020 15:50	5/1/2020 16:35	45	1.02	0.27	56,894	0.056894
15	5/3/2020 5:40	5/3/2020 5:45	5	1.02	0.27	5,033	0.005033
16	5/15/2020 19:15	5/15/2020 19:55	40	0.41	0.33	130,729	0.130729
17	6/6/2020 13:00	6/6/2020 13:50	50	0.14	0.02	163,267	0.163267
18	6/11/2020 10:20	6/11/2020 10:50	30	0.24	0.19	10,513	0.010513
19	6/28/2020 13:25	6/28/2020 15:10	105	0.85	0.38	201,907	0.201907
20	6/29/2020 14:15	6/29/2020 14:50	35	0.9	0.83	25,775	0.025775
21	7/3/2020 12:55	7/3/2020 14:40	105	1.08	0.48	82,997	0.082997
22	7/6/2020 19:10	7/6/2020 20:20	70	0.26	0.26	301,794	0.301794
23	7/14/2020 11:35	7/14/2020 12:15	40	0.55	0.54	51,272	0.051272
24	7/22/2020 17:10	7/22/2020 21:20	250	0.51	0.33	279,981	0.279981
25	7/29/2020 22:50	7/29/2020 23:25	35	0.1	0.1	80,126	0.080126
26	8/2/2020 13:45	8/2/2020 15:00	75	1.17	1.12	315,605	0.315605
27	8/4/2020 14:30	8/4/2020 14:50	20	0.28	0.16	990	0.000990
28	8/17/2020 20:35	8/17/2020 21:10	35	0.51	0.5	64,245	0.064245
29	8/19/2020 15:30	8/19/2020 16:00	30	0.22	0.22	36,640	0.036640
30	8/23/2020 20:35	8/23/2020 21:05	30	0.05	0.05	34,302	0.034302
31	8/29/20 6:50	8/29/2020 7:55	65	0.72	0.57	93,329	0.093329
32	9/3/2020 0:40	9/3/2020 3:05	145	1.74	1.25	517,012	0.517012
33	9/10/2020 15:30	9/10/2020 15:50	20	0.01	0.01	1,491	0.001491
34	9/29/2020 23:40	9/30/2020 0:50	70	0.47	0.3	88,035	0.088035
35	9/30/2020 4:05	9/30/2020 6:10	125	0.04	0.04	159,374	0.159374
36	9/30/20 2:05	9/30/20 3:10	65	0:57	0.04	140	0.00014



CSO 011  
2020 Activations

37	10/13/2020 3:15	10/13/2020 15:40	745	0.22	0.11	148,139	0.148139
38	10/16/2020 13:40	10/16/2020 17:00	200	1.51	0.27	134,050	0.134050
39	10/16/2020 23:00	10/17/2020 4:20	320	0.54	0.18	62,334	0.062334
40	10/29/2020 15:15	10/29/2020 17:00	105	1.1	0.22	29,372	0.029372
41	11/15/2020 20:10	11/15/2020 22:30	140	0.7	0.26	71,292	0.071292
42	11/23/2020 7:20	11/23/2020 10:45	205	0.43	0.24	104,180	0.104180
43	11/26/2020 6:25	11/26/2020 8:10	105	0.95	0.33	88,391	0.088391
44	11/30/2020 13:20	11/30/2020 21:10	470	2.45	0.54	462,402	0.462402
45	12/5/2020 6:45	12/5/2020 11:50	305	1.85	0.25	103,890	0.103890
46	12/5/2020 12:50	12/5/2020 15:55	185	1.85	0.25	113,382	0.113382
47	12/25/2020 1:20	12/25/2020 6:35	315	2.27	0.21	307,195	0.307195
48	12/25/2020 12:00	12/25/2020 15:15	195	2.27	0.21	92,016	0.092016
49	12/26/2020 7:15	12/26/2020 7:25	10	2.27	0.21	10,697	0.010697
50	12/27/20 7:15	12/27/2020 7:30	15	2.27	0.21	51,296	0.051296
51	12/27/2020 19:00	12/27/2020 20:15	75	2.27	0.21	179,862	0.179862

Total Overflow (MG): 6.313035



CSO 016  
2020 Activations

Wohoyoke, MA

CSO 016

Appleton Street at Nick Cosmo Way  
2020 Overflow Summary (1/1/19 - 12/31/19)

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/4/2020 7:40	1/4/2020 14:10	390	0.29	0.06	4,198	0.004198
2	1/12/2020 8:00	1/12/2020 8:40	40	0.07	0.05	1,377	0.001377
3	1/16/2020 4:55	1/16/2020 7:25	150	0.12	0.07	468	0.000468
4	1/25/2020 17:10	1/25/2020 22:50	340	0.76	0.26	50,549	0.050549
5	2/6/2020 3:15	2/6/2020 10:35	440	0.42	0.12	526	0.000526
6	2/7/2020 8:30	2/7/2020 15:15	405	0.42	0.12	11,511	0.011511
7	2/10/2020 9:55	2/10/2020 11:50	115	0.13	0.15	173	0.000173
8	2/13/2020 0:50	2/13/2020 14:25	815	0.89	0.12	22,925	0.022925
9	2/18/2020 17:00	2/18/2020 21:30	270	0.29	0.09	6,338	0.006338
10	2/25/2020 19:40	2/27/2020 5:05	2005	0.94	0.18	25,015	0.025015
11	3/24/2020 10:50	3/24/2020 13:35	165	0.53	0.22	2,116	0.002116
12	3/28/2020 17:45	3/29/2020 6:15	750	0.58	0.15	7,217	0.007217
13	3/29/2020 10:10	3/29/2020 12:10	120	0.61	0.17	5,215	0.005215
14	3/29/2020 14:40	3/29/2020 15:25	45	0.61	0.17	642	0.000642
15	3/29/2020 18:35	3/29/2020 20:15	100	0.61	0.17	2,720	0.002720
16	3/30/2020 14:35	3/30/2020 15:20	45	0.1	0.06	1,687	0.001687
17	4/2/2020 19:20	4/3/2020 9:50	870	0.15	0.08	1,791	0.001791
18	4/8/2020 1:30	4/8/2020 3:40	130	0.15	0.04	168	0.000168
19	4/9/2020 9:25	4/9/2020 15:00	335	0.39	0.22	17,485	0.017485
20	4/13/2020 4:15	4/13/2020 19:00	885	1.6	0.26	78,325	0.078325
21	4/17/2020 23:10	4/18/2020 11:00	710	0.09	0.06	3,891	0.003891
22	4/21/2020 13:10	4/21/2020 15:55	165	0.48	0.34	18,530	0.018530
23	4/24/2020 3:10	4/24/2020 5:40	150	0.2	0.04	40	0.000040
24	4/24/2020 11:15	4/24/2020 13:50	155	0.2	0.04	1,227	0.001227
25	4/26/2020 16:45	4/27/2020 0:45	480	0.38	0.1	5,402	0.005402
26	4/27/2020 18:45	4/27/2020 22:40	235	0.3	0.05	814	0.000814
27	4/30/2020 5:05	4/30/2020 23:55	1130	0.27	0.07	27,751	0.027751
28	5/1/2020 0:00	5/1/2020 7:45	465	1.02	0.27	36,168	0.036168
29	5/11/2020 12:10	5/11/2020 19:15	425	0.3	0.26	4,057	0.004057
30	5/15/2020 19:15	5/15/2020 21:55	160	0.41	0.33	46,596	0.046596
31	5/1/2020 15:50	5/1/2020 19:25	215	1.02	0.27	2,822	0.002822
32	5/8/2020 20:30	5/9/2020 2:15	345	0.16	0.05	140	0.000140
33	6/6/2020 13:00	6/6/2020 13:25	25	0.14	0.02	84,130	0.084130
34	6/11/2020 10:20	6/11/2020 11:45	85	0.24	0.19	3,794	0.003794
35	6/27/2020 13:55	6/27/2020 14:15	20	0.3	0.15	722	0.000722

Subtotal Pgl Overflow (MG): 0.476530





CSO 016  
2020 Activations

Iolyoke, MA

CSO 016

Appleton Street at Nick Cosmo Way

2020 Overflow Summary (1/1/19 - 12/31/19)

Subtotal Pg1 0.476530

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
36	6/28/2020 13:25	6/28/2020 15:00	95	0.85	0.38	12,655	0.012655
37	6/28/2020 17:30	6/28/2020 19:15	105	0.85	0.38	2,330	0.002330
38	6/28/2020 21:20	6/28/2020 21:55	35	0.85	0.38	183	0.000183
39	6/29/2020 14:10	6/29/2020 14:45	35	0.9	0.83	24,379	0.024379
40	6/30/2020 17:15	6/30/2020 17:20	5	1.04	0.59	87	0.000087
41	7/3/2020 12:50	7/3/2020 17:20	270	1.08	0.48	27,591	0.027591
42	7/6/2020 19:00	7/6/2020 20:05	65	0.26	0.26	66,227	0.066227
43	7/14/2020 11:35	7/14/2020 12:00	25	0.55	0.54	18,821	0.018821
44	7/22/2020 17:10	7/22/2020 21:00	230	0.51	0.33	44,863	0.044863
45	7/29/2020 22:50	7/29/2020 23:00	10	0.1	0.1	17,068	0.017068
46	8/2/2020 13:55	8/2/2020 14:15	20	1.17	1.12	52,342	0.052342
47	8/17/2020 20:40	8/17/2020 20:50	10	0.51	0.5	6,574	0.006574
48	8/19/2020 15:30	8/19/2020 15:35	5	0.22	0.22	3,632	0.003632
49	9/3/2020 1:00	9/3/2020 2:00	60	1.74	1.25	151,363	0.151363
50	9/30/2020 5:15	9/30/2020 5:30	15	0.04	0.04	45,371	0.045371
51	10/12/2020 11:15	10/12/2020 11:40	25	0.09	0.05	83	0.000083
52	10/13/2020 1:05	10/13/2020 11:00	595	0.22	0.11	50,034	0.050034
53	10/13/2020 11:05	10/13/2020 16:55	350	0.22	0.11	11,204	0.011204
54	10/16/2020 11:25	10/16/2020 19:55	510	1.51	0.27	49,135	0.049135
55	10/16/2020 20:10	10/17/2020 5:30	560	1.51	0.27	50,636	0.050636
56	10/20/2020 9:35	10/20/2020 9:40	5	0.01	0.01	90	0.000090
57	10/26/2020 4:10	10/26/2020 9:15	305	0.22	0.07	2,083	0.002083
58	10/28/2020 4:00	10/28/2020 11:50	470	0.49	0.12	9,652	0.009652
59	10/29/2020 9:00	10/29/2020 23:25	865	1.1	0.22	36,014	0.036014
60	10/30/2020 0:30	10/30/2020 15:30	900	0.38	0.07	2,713	0.002713
61	11/1/2020 16:25	11/1/2020 20:50	265	0.35	0.12	10,339	0.010339
62	11/3/2020 7:55	11/3/2020 8:35	40	0.04	0.02	155	0.000155
63	11/3/2020 9:20	11/3/2020 9:25	5	0.04	0.02	12	0.000012
64	11/3/2020 18:15	11/3/2020 18:50	35	0.04	0.02	350	0.00035
65	11/11/2020 18:20	11/11/2020 21:25	185	0.03	0.02	4,226	0.004226
66	11/13/2020 12:35	11/13/2020 14:45	130	0.13	0.05	1,421	0.001421
67	11/23/2020 5:15	11/23/2020 11:35	380	0.43	0.24	46944	0.046944
68	11/15/2020 19:30	11/15/2020 22:50	200	0.7	0.26	29,070	0.029070
69	11/26/2020 5:35	11/26/2020 11:50	375	0.95	0.33	43,961	0.043961
70	11/26/2020 13:35	11/26/2020 14:00	25	0.95	0.33	225	0.000225
71	11/30/2020 10:45	11/30/2020 23:15	750	2.45	0.54	169,027	0.169027
72	12/5/2020 5:40	12/5/2020 18:35	775	1.85	0.25	109,405	0.109405



73	12/12/2020 16:50	12/12/2020 17:40	50	0.09	0.05	1,424	0.001424
74	12/14/2020 12:15	12/14/2020 13:40	85	0.11	0.04	353	0.000353
75	12/24/2020 15:30	12/25/2020 16:50	1520	2.27	0.21	180966	0.180966
76	12/31/2020 4:30	12/31/2020 5:50	80	0.16	0.09	2,535	0.002535

1.762073



CSO 018  
2020 Activations

Holyoke, MA  
CSO 018  
Walnut Street  
2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/12/2020 6:40	1/12/2020 7:10	30	0.07	0.05	3,300	0.003300
2	1/25/2020 15:55	1/25/2020 19:20	205	0.76	0.26	158,890	0.158890
3	2/7/2020 10:05	2/7/2020 10:55	50	0.42	0.12	11,026	0.011026
4	2/10/2020 8:50	2/10/2020 10:05	75	0.13	0.15	7,198	0.007198
5	2/13/2020 4:05	2/13/2020 6:35	150	0.89	0.12	4,980	0.004980
6	2/18/2020 17:20	2/18/2020 17:50	30	0.29	0.09	184,525	0.184525
7	2/27/2020 1:30	2/27/2020 6:55	325	0.94	0.18	486	0.000486
8	3/13/2020 4:35	3/13/2020 8:30	235	0.67	0.18	68,797	0.068797
9	3/19/2020 2:10	3/19/2020 6:15	245	0.79	0.2	110,436	0.110436
10	3/24/2020 8:35	3/24/2020 9:40	65	0.53	0.22	870	0.000870
11	3/28/2020 20:35	3/28/2020 20:55	20	0.58	0.15	390	0.000390
12	3/29/2020 9:25	3/29/2020 10:15	50	0.61	0.17	5,933	0.005933
13	3/29/2020 17:15	3/29/2020 17:45	30	0.61	0.17	4,269	0.004269
14	4/9/2020 10:55	4/9/2020 13:00	125	0.39	0.22	10,896	0.010896
15	4/13/2020 5:25	4/13/2020 17:15	710	1.6	0.26	216,031	0.216031
16	4/21/2020 12:05	4/21/2020 13:55	110	0.48	0.34	58,988	0.058988
17	4/30/2020 7:50	4/30/2020 23:55	965	0.27	0.07	127,365	0.127365
18	5/1/2020 0:00	5/1/2020 2:00	120	1.02	0.27	58,788	0.058788
19	5/1/2020 14:40	5/1/2020 15:15	35	1.02	0.27	4,147	0.004147
20	5/11/2020 14:25	5/11/2020 14:55	30	0.3	0.26	11,668	0.011668
21	5/15/2020 17:55	5/15/2020 18:30	35	0.41	0.33	187,102	0.187102
22	6/6/2020 11:40	6/6/2020 12:35	55	0.14	0.14	483,959	0.483959
23	6/11/2020 9:00	6/11/2020 10:20	80	0.24	0.19	27,202	0.027202
24	6/27/2020 12:35	6/27/2020 13:55	80	0.3	0.15	14,331	0.014331
25	6/28/2020 12:10	6/28/2020 17:50	340	0.85	0.38	147,471	0.147471
26	6/28/2020 19:50	6/28/2020 20:30	40	0.85	0.38	21,797	0.021797
27	6/29/2020 12:45	6/29/2020 14:05	80	0.9	0.83	255,957	0.255957
28	6/30/2020 14:35	6/30/2020 16:05	90	1.04	0.59	54,488	0.054488
29	7/3/2020 11:30	7/3/2020 15:55	265	1.08	0.48	542,607	0.542607
30	7/6/2020 17:35	7/6/2020 19:10	95	0.26	0.26	2,058,216	2.058216
31	7/14/2020 10:20	7/14/2020 10:30	10	0.55	0.54	12,927	0.012927
32	7/22/2020 15:50	7/22/2020 20:05	255	0.51	0.33	1,558,100	1.558100
33	7/23/2020 13:00	7/23/2020 13:30	30	0.13	0.11	11,937	0.011937
34	7/29/2020 21:30	7/29/2020 22:05	35	0.1	0.1	349,978	0.349978
35	7/10/2020 13:15	7/10/2020 13:20	5	0.03	0.03	97	0.000097

Subtotal pgl Overflow (MG): 6.775152



CSO 018  
2020 Activations

Holyoke, MA  
CSO 018  
Walnut Street  
2020 Overflow Summary 1/1/20-12/31/20

Subtotal Pg1 6.775152

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
36	7/29/2020 23:15	7/29/2020 23:50	35	0.1	0.1	37,598	0.037598
37	8/2/2020 14:10	8/2/2020 14:55	45	1.17	1.12	56,324	0.056324
38	8/27/2020 14:25	8/27/2020 14:30	5	0.2	0.1	2,724	0.002724
39	8/29/2020 7:30	8/29/2020 8:20	50	0.72	0.57	56,025	0.056025
40	9/2/2020 10:45	9/2/2020 11:15	30	5:45	0.09	3045	0.003045
41	9/2/2020 23:15	9/3/2020 1:40	145	5:45	0.09	2016616	2.016616
42	9/10/2020 8:45	9/10/2020 9:00	15	0:14	0.01	2467	0.002467
43	9/10/2020 14:00	9/10/2020 14:25	25	0:14	0.01	12250	0.01225
44	9/22/2020 18:35	9/22/2020 18:40	5	0:00	0	14	0.000014
45	9/29/2020 22:15	9/29/2020 23:30	75	11:16	0.3	139861	0.139861
46	9/30/2020 0:40	9/30/2020 4:50	250	0:57	0.04	548474	0.548474
47	10/7/2020 15:00	10/7/2020 15:25	25	3:21	0.07	2682	0.002682
48	10/13/2020 1:50	10/13/2020 14:20	750	5:16	0.11	175635	0.175635
49	10/16/2020 12:10	10/16/2020 16:05	235	12:14	0.27	128358	0.128358
50	10/16/2020 21:25	10/17/2020 3:00	335	12:14	0.27	145338	0.145338
51	10/28/2020 6:50	10/28/2020 7:00	10	11:45	0.12	908	0.000908
52	10/29/2020 8:45	10/29/2020 18:15	570	2:24	0.22	62372	0.062372
53	11/1/2020 15:55	11/1/2020 19:00	185	0.35	0.12	12,123	0.012123
54	11/15/2020 18:15	11/15/2020 21:00	165	0.7	0.26	77,282	0.077282
55	11/23/2020 5:50	11/23/2020 9:30	220	0.43	0.24	107,876	0.107876
56	11/26/2020 4:35	11/26/2020 9:10	275	0.95	0.33	106,068	0.106068
57	11/30/2020 9:50	11/30/2020 19:40	590	2.45	0.54	777,720	0.777720
58	12/5/2020 4:50	12/5/2020 16:05	675	1.85	0.25	226,727	0.226727
59	12/24/2020 23:50	12/25/2020 14:00	850	2.27	0.21	295,903	0.295903

Subtotal Page 2 Overflow (MG): 11.769542



CSO 018A  
2020 Activations

**Holyoke, MA**  
**CSO 018A**  
**Essex Street at Walnut Street**  
**2020 Overflow Summary 1/1/20-12/31/20**

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	5/15/2020 19:10	5/15/2020 19:20	10	0.41	0.33	8,764	0.008764
2	6/6/2020 13:00	6/6/2020 13:05	5	0.14	0.14	1,479	0.001479
3	7/6/2020 18:55	7/6/2020 19:40	45	0.26	0.26	28,215	0.028215
4	7/9/2020 11:45	7/9/2020 15:35	230	0.03	0.03	80,126	0.007655
5	7/22/2020 17:15	7/22/2020 20:50	215	0.51	0.33	9,825	0.009825
6	7/29/20 22:50	7/29/2020 22:55	5	0.1	0.1	6,458	0.006458
7	8/2/2020 13:55	8/2/2020 14:05	10	1.17	1.12	12,917	0.012917
8	9/3/20 1:05	9/3/2020 3:00	115	1.74	1.25	64,761	0.064761
9	9/4/20 7:30	9/4/2020 7:40	10	0	0	1,665	0.001665
10	9/5/20 9:10	9/5/2020 13:25	255	0	0	67,766	0.067766
11	9/8/20 11:00	9/8/2020 11:35	35	0	0	35,005	0.035005
12	9/9/20 13:40	9/9/2020 16:20	160	0.01	0.01	8,994	0.008994
13	9/30/20 5:15	9/30/2020 5:20	5	0.04	0.04	217	0.000217

Total Overflow (MG): 0.253721



CSO 018B  
2020 Activations

Ioloyoke, MA

CSO 018B

Highland Pump Station

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/4/2020 11:00	1/4/2020 13:40	160	0.29	0.06	138,817	0.138817
2	1/25/2020 18:00	1/25/2020 22:05	245	0.76	0.26	534,909	0.534909
3	2/10/2020 9:45	2/10/2020 11:15	90	0.13	0.15	142,907	0.142907
4	2/27/2020 4:20	2/27/2020 8:30	250	0.94	0.18	347,250	0.347250
5	3/13/2020 8:35	3/13/2020 10:10	95	0.67	0.18	82,006	0.082006
6	3/19/20 3:50	3/19/2020 8:15	265	0.79	0.2	369,928	0.369928
7	3/24/20 9:30	3/24/2020 13:20	230	0.53	0.22	345,979	0.345979
8	3/28/20 22:00	3/28/2020 23:25	85	0.58	0.15	120,472	0.120472
9	3/29/20 18:50	3/29/2020 19:25	35	0.61	0.17	34,602	0.034602
10	3/29/20 10:50	3/29/2020 12:05	75	0.61	0.17	102,284	0.102284
11	3/30/20 15:00	3/30/2020 15:20	20	0.1	0.06	16,558	0.016558
12	4/9/20 12:25	4/9/2020 15:00	155	0.39	0.22	159,254	0.159254
13	4/13/20 6:45	4/13/2020 19:10	745	1.6	0.26	1,147,701	1.147701
14	4/18/20 10:50	4/18/2020 10:55	5	0.46	0.24	920	0.000920
15	4/21/20 13:50	4/21/2020 15:45	115	0.48	0.34	184,239	0.184239
16	4/26/20 19:25	4/26/2020 19:55	30	0.38	0.1	25,283	0.025283
17	4/27/20 0:10	4/27/2020 0:50	40	0.3	0.05	39,556	0.039556
18	4/30/2020 7:00	4/30/2020 14:05	425	0.27	0.07	508,143	0.508143
19	5/1/2020 0:00	5/1/2020 6:25	385	1.02	0.27	600,987	0.600987
20	5/1/2020 16:05	5/1/2020 17:55	110	1.02	0.27	184,745	0.184745
21	5/11/2020 16:00	5/11/2020 16:35	35	0.3	0.26	48,021	0.048021
22	5/15/2020 19:35	5/15/2020 21:05	90	0.41	0.33	139,711	0.139711
23	6/6/2020 13:25	6/6/2020 14:20	55	0.14	0.14	92,025	0.092025
24	6/11/2020 11:05	6/11/2020 12:00	55	0.24	0.19	82,848	0.082848
25	6/27/2020 14:20	6/27/2020 15:45	85	0.3	0.15	86,370	0.086370
26	6/28/2020 14:05	6/28/2020 15:30	85	0.85	0.38	97,313	0.097313
27	6/28/2020 21:55	6/28/2020 22:10	15	0.85	0.38	9,691	0.009691
28	6/29/2020 14:30	6/29/2020 15:50	80	0.9	0.83	117,629	0.117629
29	6/30/2020 16:20	6/30/2020 17:50	90	1.04	0.59	121,868	0.121868
30	7/3/2020 13:10	7/3/2020 17:35	265	1.08	0.48	392,865	0.392865
31	7/6/2020 19:15	7/6/2020 23:40	265	0.26	0.26	362,091	0.362091
32	7/7/2020 3:40	7/7/2020 9:00	320	0.26	0.26	5,747	0.005747
33	7/13/2020 12:55	7/13/2020 13:25	30	0.42	0.41	19,833	0.019833
34	7/14/2020 12:00	7/14/2020 12:35	35	0.55	0.54	34,106	0.034106
35	7/22/2020 17:25	7/22/2020 21:45	260	0.51	0.33	191,915	0.191915

Subtotal Pg1 Overflow (MG): 6.888573



CSO 018B  
2020 Activations

Iolyoke, MA  
CSO 018B  
Highland Pump Station  
2020 Overflow Summary 1/1/20-12/31/20

Subtotal Pg1 6.888573

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
36	7/29/2020 23:15	7/29/2020 23:50	35	0.1	0.1	37,598	0.037598
37	8/2/2020 14:10	8/2/2020 14:55	45	1.17	1.12	56,324	0.056324
38	8/27/2020 14:25	8/27/2020 14:30	5	0.2	0.1	2,724	0.002724
39	8/29/2020 7:30	8/29/2020 8:20	50	0.72	0.57	56,025	0.056025
40	9/3/2020 1:10	9/3/2020 2:50	100	17:45	1.25	143852	0.143852
41	9/30/2020 0:30	9/30/2020 6:05	335	0:57	0.04	375884	0.375884
42	10/13/2020 7:20	10/13/2020 11:15	235	0.22	0.11	43,577	0.043577
43	10/16/2020 15:15	10/16/2020 16:55	100	1.51	0.27	60,800	0.060800
44	10/17/2020 0:25	10/17/2020 2:40	135	0.54	0.18	23,255	0.023255
45	10/29/2020 16:05	10/29/2020 17:05	60	1.1	0.22	22,959	0.022959
46	11/15/2020 21:00	11/15/2020 22:35	95	0.7	0.26	53,605	0.053605
47	11/23/2020 8:20	11/23/2020 11:15	175	0.43	0.24	171,157	0.171157
48	11/26/2020 6:40	11/26/2020 11:50	310	0.95	0.33	200,808	0.200808
49	11/30/2020 11:55	11/30/2020 22:15	620	2.45	0.54	833,536	0.833536
50	12/5/2020 6:40	12/5/2020 18:15	695	1.85	0.25	808,728	0.808728
51	12/25/2020 1:20	12/25/2020 16:40	920	2.27	0.31	1,022,418	1.022418

Subtotal Page 2 Overflow (MG): 10.801823



CSO 019  
2020 Activations

Holyoke, MA

CSO 019

Pleasant Street R.O.W.

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	5/15/2020 19:15	5/15/2020 19:25	10	0.41	0.33	699	0.000699
2	6/6/2020 13:05	6/6/2020 13:25	20	0.14	0.14	2,218	0.002218
3	6/28/2020 13:35	6/28/2020 13:40	5	0.85	0.38	564	0.000564
4	6/29/2020 14:10	6/29/2020 14:25	15	0.9	0.83	1,032	0.001032
5	6/30/2020 15:55	6/30/2020 16:00	5	1.04	0.59	26	0.000026
6	7/6/2020 19:00	7/6/2020 19:55	55	0.26	0.26	10,687	0.010687
7	7/13/2020 12:20	7/13/2020 12:45	25	0.42	0.41	2,998	0.002998
8	7/14/2020 11:30	7/14/2020 12:00	30	0.55	0.54	2,325	0.002325
9	7/22/2020 17:10	7/22/2020 21:00	230	0.51	0.33	7,145	0.007145
10	7/29/20 22:50	7/29/2020 23:20	30	0.1	0.1	2,691	0.002691
11	8/2/2020 13:40	8/2/2020 14:20	40	1.17	1.12	4,014	0.004014
12	8/17/2020 20:25	8/17/2020 20:45	20	0.51	0.5	2,246	0.002246
13	9/3/2020 0:45	9/3/2020 1:55	70	1.74	1.25	9,011	0.009011
14	9/30/2020 0:05	9/30/2020 0:25	20	0.04	0.04	1,700	0.001700
15	9/30/2020 5:05	9/30/2020 5:30	25	0.04	0.04	1,412	0.001412
16	9/3/20 0:45	9/3/2020 1:55	70	1.74	1.25	9,011	0.009011
17	9/30/2020 0:05	9/30/2020 0:25	20	0.04	0.04	1,700	0.001700
18	9/30/2020 5:05	9/30/2020 5:30	25	0.04	0.04	1,412	0.001412
19	10/16/2020 15:20	10/16/2020 15:25	5	1.51	0.27	51	0.000051
20	11/30/2020 13:55	11/30/2020 15:10	75	2.45	0.54	4,193	0.004193

Total Overflow (MG):

0.065135





CSO 020  
2020 Activations

Iolyoke, MA

CSO 020

Cleveland Street at Oxford Road

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/4/2020 9:50	1/4/2020 14:35	285	0.29	0.06	15,225	0.015225
2	1/12/2020 7:55	1/12/2020 8:40	45	0.07	0.05	22,506	0.022506
3	1/25/2020 17:15	1/25/2020 22:20	305	0.76	0.26	357,970	0.357970
4	2/7/2020 10:30	2/10/2020 12:45	4455	0.42	0.12	147,987	0.147987
5	2/13/2020 5:35	2/13/2020 9:15	220	0.89	0.12	29,311	0.029311
6	2/18/2020 18:05	2/18/2020 20:55	170	0.29	0.09	32,459	0.032459
7	2/27/2020 2:45	2/27/2020 9:35	410	0.94	0.18	358,821	0.358821
8	3/13/2020 6:15	3/13/2020 9:55	220	0.67	0.18	125,163	0.125163
9	3/19/2020 3:30	3/19/2020 8:10	280	0.79	0.2	196,714	0.196714
10	3/20/2020 6:50	3/20/2020 7:15	25	0.09	0.02	1,439	0.001439
11	3/24/2020 9:30	3/24/2020 13:35	245	0.53	0.22	46,638	0.046638
12	3/28/2020 19:50	3/28/2020 23:05	195	0.58	0.15	14,895	0.014895
13	3/29/2020 10:35	3/29/2020 15:30	295	0.61	0.17	33,582	0.033582
14	3/29/2020 18:35	3/29/2020 20:00	85	0.61	0.17	14,160	0.014160
15	3/30/2020 14:40	3/30/2020 15:25	45	0.1	0.06	4,741	0.004741
16	4/2/2020 20:00	4/2/2020 20:10	10	0.15	0.08	329	0.000329
17	4/3/2020 3:25	4/3/2020 3:30	5	0.29	0.11	250	0.000250
18	4/9/2020 12:10	4/9/2020 14:50	160	0.39	0.22	88,621	0.088621
19	4/13/2020 5:10	4/14/2020 12:05	1855	1.6	0.26	613,778	0.613778
20	4/18/2020 1:05	4/18/2020 11:35	630	0.46	0.24	1,249	0.001249
21	4/21/2020 13:20	4/21/2020 16:10	170	0.48	0.34	116,579	0.116579
22	4/24/2020 12:25	4/24/2020 12:30	5	0.2	0.04	515	0.000515
23	4/26/2020 18:50	4/26/2020 21:35	165	0.38	0.1	10,092	0.010092
24	4/26/2020 22:35	4/27/2020 0:45	130	0.38	0.1	5,184	0.005184
25	4/27/2020 19:10	4/27/2020 20:20	70	0.3	0.05	3,192	0.003192
26	4/30/2020 7:00	4/30/2020 23:55	1015	0.27	0.07	177,327	0.177327
27	5/1/2020 0:00	5/2/2020 2:45	1605	1.02	0.27	518,160	0.518160
28	5/2/2020 5:20	5/2/2020 20:30	910	1.02	0.27	12,694	0.012694
29	5/3/2020 8:35	5/3/2020 12:15	220	1.02	0.27	1,443	0.001443
30	5/11/2020 15:25	5/11/2020 16:45	80	0.3	0.26	31,525	0.031525
31	5/15/2020 19:15	5/15/2020 21:00	105	0.41	0.33	53,090	0.053090
32	6/6/2020 13:05	6/6/2020 14:00	55	0.14	0.14	58,448	0.058448
33	6/11/2020 10:25	6/11/2020 11:45	80	0.24	0.19	25,081	0.025081
34	6/27/2020 14:20	6/27/2020 14:45	25	0.3	0.15	5,610	0.005610
35	6/28/2020 13:30	6/28/2020 14:50	80	0.85	0.38	42,787	0.042787

Subtotal Overflow Pgl (MG):

3.167565



CSO 020  
2020 Activations

Iolyoke, MA

CSO 020

Cleveland Street at Oxford Road

2020 Overflow Summary (1/1/20 - 12/31/20)

Subtotal Pg1 3.167565

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
36	6/29/2020 14:00	6/29/2020 15:05	65	0.9	0.83	85,288	0.085288
37	6/30/2020 15:40	6/30/2020 17:30	110	1.04	0.59	98,968	0.098968
38	7/3/2020 12:40	7/3/2020 17:10	270	1.08	0.48	252,831	0.252831
39	7/6/2020 18:55	7/6/2020 20:40	105	0.26	0.26	142,753	0.142753
40	7/10/2020 14:50	7/10/2020 15:15	25	0.03	0.03	9,782	0.009782
41	7/13/2020 12:15	7/13/2020 13:25	70	0.42	0.41	82,195	0.082195
42	7/14/2020 11:30	7/14/2020 12:00	30	0.55	0.54	40,009	0.040009
43	7/22/2020 17:10	7/22/2020 21:10	240	0.51	0.33	106,671	0.106671
44	7/29/2020 22:50	7/29/2020 23:20	30	0.1	0.1	35,218	0.035218
45	8/2/2020 13:40	8/2/2020 14:35	55	1.17	1.12	66,652	0.066652
46	8/4/2020 14:30	8/4/2020 14:45	15	0.28	0.16	4,762	0.004762
47	8/17/2020 20:25	8/17/2020 21:00	35	0.51	0.5	43,918	0.043918
48	8/27/2020 13:05	8/27/2020 13:55	50	0.2	0.1	12,430	0.012430
49	8/29/2020 6:50	8/29/2020 8:05	75	0.72	0.57	80,085	0.080085
50	9/2/2020 12:10	9/2/2020 12:50	40	0.24	0.09	20,158	0.020158
51	9/3/2020 0:30	9/3/2020 3:15	165	1.74	1.25	293,268	0.293268
52	9/10/2020 15:50	9/10/2020 16:40	50	0.01	0.01	32,162	0.032162
53	9/23/2020 8:05	9/23/2020 11:30	205	0	0	87,844	0.087844
54	9/29/2020 17:05	9/29/2020 17:15	10	0.47	0.3	632	0.000632
55	9/29/2020 23:45	9/30/2020 1:10	85	0.47	0.3	106,314	0.106314
56	9/30/2020 2:10	9/30/2020 6:45	275	0.04	0.04	253,153	0.253153
57	10/13/2020 3:25	10/13/2020 11:10	465	0.22	0.11	307,295	0.307295
58	10/13/2020 14:40	10/13/2020 16:00	80	0.22	0.11	50,989	0.050989
59	10/14/2020 8:50	10/14/2020 9:20	30	0.22	0.11	4,432	0.004432
60	10/16/2020 13:35	10/16/2020 18:25	290	1.51	0.27	275,023	0.275023
61	10/16/2020 22:55	10/17/2020 5:00	365	1.51	0.27	330,831	0.330831
62	10/28/2020 8:20	10/28/2020 9:40	80	0.49	0.12	20,277	0.020277
63	10/29/2020 10:15	10/29/2020 20:05	590	1.1	0.22	264,442	0.264442
64	10/30/2020 7:15	10/30/2020 7:20	5	0.38	0.07	591	0.000591
65	11/1/2020 17:20	11/1/2020 20:40	200	0.35	0.12	82,599	0.082599
66	11/15/2020 19:50	11/15/2020 22:50	180	0.7	0.26	167,431	0.167431
67	11/23/2020 7:20	11/23/2020 11:10	230	0.43	0.24	216,479	0.216479
68	11/26/2020 6:00	11/26/2020 11:35	335	0.95	0.33	222,897	0.222897
69	11/30/2020 11:25	11/30/2020 23:55	750	2.45	0.54	880,062	0.880062
70	12/1/2020 1:15	12/1/2020 13:00	705	0.01	0.01	56,927	0.056927
71	12/5/2020 6:20	12/6/2020 21:00	2320	1.85	0.25	567,033	0.567033
72	12/25/2020 1:15	12/27/2020 2:20	2945	2.27	0.31	1,223,404	1.223404



73	12/27/2020 3:55	12/27/2020 23:40	1185	2.27	0.31	9,061	0.009061
74	12/28/2020 10:45	12/28/2020 18:40	475	2.27	0.31	280	0.000280
75	12/31/2020 4:55	12/31/2020 5:25	90	0.16	0.09	1,383	0.001383

Subtotal Page 2 Overflow (MG): 9.704094



CSO 021  
2020 Activations

Iolyoke, MA

CSO 021

Pleasant Street at River Terrace

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/12/2020 8:05	1/12/2020 8:15	10	0.07	0.05	882	0.000882
2	1/25/2020 17:20	1/25/2020 20:30	190	0.76	0.26	311,218	0.311218
3	2/7/2020 11:30	2/7/2020 11:50	20	0.42	0.12	4,867	0.004867
4	2/27/2020 2:55	2/27/2020 7:55	300	0.94	0.18	100,192	0.100192
5	3/13/2020 7:10	3/13/2020 8:45	95	0.67	0.18	48,412	0.048412
6	3/19/2020 4:10	3/19/2020 7:10	180	0.79	0.2	71,853	0.071853
7	3/29/2020 10:55	3/29/2020 11:00	5	0.61	0.17	331	0.000331
8	4/9/2020 13:35	4/9/2020 14:10	35	0.39	0.22	74,741	0.074741
9	4/13/2020 8:45	4/13/2020 16:45	480	1.6	0.26	405,224	0.405224
10	4/21/2020 13:40	4/21/2020 14:55	75	0.48	0.34	59,871	0.059871
11	4/30/2020 12:00	4/30/2020 23:55	715	0.07	0.07	43,743	0.043743
12	5/1/2020 0:00	5/1/2020 3:20	200	1.02	0.27	300,461	0.300461
13	5/1/2020 16:10	5/1/2020 17:00	50	1.02	0.27	14,145	0.014145
14	5/11/2020 15:45	5/11/2020 16:05	20	0.3	0.26	25,805	0.025805
15	5/15/2020 19:10	5/15/2020 19:45	35	0.41	0.33	115,665	0.115665
16	6/6/2020 13:10	6/6/2020 13:40	30	0.14	0.14	107,437	0.107437
17	6/28/2020 13:35	6/28/2020 13:55	20	0.85	0.38	35,989	0.035989
18	6/29/2020 14:00	6/29/2020 14:40	40	0.9	0.83	185,688	0.185688
19	6/30/2020 15:35	6/30/2020 16:20	45	1.04	0.59	137,761	0.137761
20	7/3/2020 12:40	7/3/2020 14:15	95	1.08	0.48	341,120	0.341120
21	7/6/2020 18:55	7/6/2020 20:25	90	0.26	0.26	529,622	0.529622
22	7/10/2020 14:35	7/10/2020 15:15	40	0.03	0.03	55,879	0.055879
23	7/13/2020 12:15	7/13/2020 13:30	75	0.42	0.41	395,543	0.395543
24	7/14/2020 11:25	7/14/2020 12:10	45	0.55	0.44	145,316	0.145316
25	7/22/2020 17:10	7/22/2020 21:20	250	0.51	0.33	368,409	0.368409
26	7/29/2020 22:50	7/29/2020 23:35	45	0.1	0.1	112,408	0.112408
27	8/2/2020 13:35	8/2/2020 14:50	75	1.17	1.12	214,355	0.214355
28	8/4/2020 14:25	8/4/2020 15:10	45	0.28	0.16	56,104	0.056104
29	8/17/2020 20:25	8/17/2020 21:15	50	0.51	0.5	221,780	0.221780
30	8/27/2020 12:20	8/27/2020 14:05	105	0.2	0.1	87,694	0.087694
31	8/29/2020 7:00	8/29/2020 7:10	10	0.72	0.57	9,028	0.009028
32	9/3/2020 0:40	9/3/2020 2:15	95	1.74	1.25	412,313	0.412313
33	9/10/2020 15:50	9/10/2020 16:05	15	0.01	0.01	21,929	0.021929
34	9/30/2020 0:05	9/30/2020 0:45	40	0.04	0.04	141,275	0.141275
35	9/30/2020 4:05	9/30/2020 5:50	105	0.04	0.04	240,099	0.240099
36	10/13/2020 6:50	10/13/2020 7:10	20	0.22	0.11	7,975	0.007975
37	10/14/2020 8:45	10/14/2020 8:50	5	0.22	0.11	648	0.000648



CSO 021  
2020 Activations

38	10/16/2020 15:10	10/16/2020 15:55	45	1.51	0.27	12,475	0.012475
39	10/17/2020 2:10	10/17/2020 2:15	5	0.54	0.18	1,526	0.001526
40	10/29/2020 16:25	10/29/2020 16:30	5	1.1	0.22	1,081	0.001081
41	11/15/2020 20:35	11/15/2020 22:10	95	0.7	0.26	27,472	0.027472
42	11/23/2020 7:30	11/23/2020 10:20	170	0.43	0.24	15,996	0.015996
43	11/26/2020 6:25	11/26/2020 7:45	80	0.95	0.33	58,413	0.058413
44	11/30/2020 13:35	11/30/2020 20:45	430	2.45	0.54	1,029,994	1.029994
45	12/5/2020 8:30	12/5/2020 14:10	340	1.85	0.25	87,844	0.087844
46	12/25/2020 1:25	12/25/2020 6:25	300	2.27	0.31	300,939	0.300939
47	12/25/2020 12:05	12/25/2020 15:05	180	2.27	0.31	109,752	0.109752

Total Overflow (MG): 7.051274



CSO 021B  
2020 Activations

Holyoke, MA

CSO 021B

Pleasant Street at River Terrace

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/12/2020 7:55	1/12/2020 8:25	30	0.07	0.05	11,327	0.011327
2	1/25/2020 17:20	1/25/2020 20:40	200	0.76	0.26	81,888	0.081888
3	2/7/2020 11:25	2/7/2020 12:05	40	0.42	0.12	13,686	0.013686
4	2/10/2020 10:30	2/10/2020 11:10	40	0.13	0.15	5,854	0.005854
5	2/27/2020 2:45	2/27/2020 8:10	325	0.94	0.18	187,928	0.187928
6	3/13/2020 6:20	3/13/2020 9:00	160	0.67	0.18	48,753	0.048753
7	3/19/2020 3:45	3/19/2020 7:20	215	0.79	0.2	96,714	0.096714
8	3/24/2020 9:55	3/24/2020 10:30	35	0.53	0.22	1,898	0.001898
9	3/28/2020 22:00	3/28/2020 22:05	5	0.58	0.15	255	0.000255
10	3/29/2020 10:45	3/29/2020 11:30	45	0.61	0.17	21,937	0.021937
11	3/29/2020 18:35	3/29/2020 19:30	55	0.61	0.17	23,137	0.023137
12	4/9/2020 12:25	4/9/2020 14:25	120	0.39	0.22	53,105	0.053105
13	4/13/2020 6:45	4/13/2020 18:55	730	1.6	0.26	389,707	0.389707
14	4/21/2020 13:30	4/21/2020 15:10	100	0.48	0.34	96,097	0.096097
15	4/26/2020 19:00	4/26/2020 19:10	10	0.38	0.1	564	0.000564
16	4/30/2020 7:00	4/30/2020 23:55	1015	0.27	0.07	178,111	0.178111
17	5/1/2020 0:00	5/1/2020 6:00	360	1.02	0.27	220,269	0.220269
18	5/1/2020 15:55	5/1/2020 20:00	245	1.02	0.27	51,889	0.051889
19	5/11/2020 15:20	5/11/2020 16:20	60	0.3	0.26	41,641	0.041641
20	5/15/2020 19:10	5/15/2020 20:10	60	0.41	0.33	63,323	0.063323
21	6/6/2020 13:20	6/6/2020 13:45	25	0.14	0.14	12,396	0.012396
22	6/28/2020 13:35	6/28/2020 14:05	30	0.85	0.38	15,876	0.015876
23	6/29/2020 14:00	6/29/2020 14:50	50	0.9	0.83	8,997	0.008997
24	6/30/2020 15:35	6/30/2020 16:20	45	1.04	0.59	18,691	0.018691
25	7/3/2020 12:40	7/3/2020 15:50	190	1.04	0.48	69,317	0.069317
26	7/6/2020 18:55	7/6/2020 19:35	40	0.26	0.26	59,691	0.059691
27	7/3/2020 12:40	7/3/2020 15:50	190	1.04	0.48	69,317	0.069317
28	7/6/2020 18:55	7/6/2020 19:35	40	0.26	0.26	59,691	0.059691
29	7/3/2020 12:40	7/3/2020 15:50	190	1.04	0.48	69,317	0.069317
30	7/6/2020 18:55	7/6/2020 19:35	40	0.26	0.26	59,691	0.059691
31	8/29/2020 6:50	8/29/2020 7:35	45	0.72	0.57	89,680	0.089680
32	9/2/2020 12:25	9/2/2020 12:30	5	0.24	0.09	1,183	0.001183
33	9/3/2020 0:40	9/3/2020 2:35	115	1.74	1.25	303,717	0.303717
34	9/10/2020 15:45	9/10/2020 16:15	30	0.01	0.01	87,676	0.087676
35	9/30/2020 0:00	9/30/2020 6:15	375	0.04	0.04	458,278	0.458278
36	10/13/2020 3:30	10/13/2020 10:45	435	0.22	0.11	304,992	0.304992
37	10/13/2020 14:45	10/13/2020 15:05	20	0.22	0.11	15,374	0.015374



38	10/14/2020 8:30	10/14/2020 9:05	35	0.22	0.11	106,504	0.106504
39	10/16/2020 14:00	10/16/2020 16:55	179	1.51	0.27	426,501	0.426501
40	10/17/2020 0:00	10/17/2020 4:10	250	0.54	0.18	287,973	0.287973
41	10/29/2020 15:20	10/29/2020 17:05	105	1.1	0.22	142,721	0.142721
42	11/1/2020 17:50	11/1/2020 20:15	145	0.35	0.12	2,335	0.002335
43	11/15/2020 19:45	11/15/2020 22:20	155	0.7	0.26	440,553	0.440553
44	11/23/2020 7:20	11/23/2020 10:50	210	0.43	0.24	486,982	0.486982
45	11/26/2020 6:10	11/26/2020 10:25	255	0.95	0.33	530,263	0.530263
46	11/30/2020 11:20	11/30/2020 23:55	755	2.45	0.54	234,804	2.348048
47	12/5/2020 6:15	12/5/2020 19:05	770	1.85	0.25	3,310,372	3.310372
48	12/25/2020 1:15	12/26/2020 1:25	1450	2.27	0.31	6,085,345	6.085345
49	12/31/2020 5:10	12/31/2020 5:15	5	0.16	0.09	882	0.000882

Total Overflow (MG):

17.460446



CSO 023  
2020 Activations

Holyoke, MA

CSO 023

Jefferson Street

2020 Overflow Summary 1/1/20-12/31/20

Monthly Overflow Event	Event Start Date/Time	Event Stop Date/Time	Event Duration (minutes)	24-hour Rainfall <sup>(1)</sup> (inches)	Peak Hourly Rainfall <sup>(1)</sup> (inches)	Discharge Volume Gallons	Discharge Volume (MG)
1	1/12/2020 7:55	1/12/2020 8:05	10	0.07	0.05	94	0.000094
2	1/25/2020 17:20	1/25/2020 20:10	170	0.76	0.26	28776	0.028776
3	2/27/2020 5:15	2/27/2020 7:30	135	0.94	0.18	183	0.000183
4	3/13/2020 8:00	3/13/2020 8:35	35	0.67	0.18	357	0.000357
5	3/19/2020 6:20	3/19/2020 6:35	15	0.79	0.2	212	0.000212
6	4/9/20 13:35	4/9/2020 14:00	25	0.39	0.22	5,147	0.005147
7	4/13/20 14:25	4/13/2020 16:25	120	1.6	0.26	13,447	0.013447
8	4/21/20 14:00	4/21/2020 14:30	30	0.48	0.34	425	0.000425
9	4/30/2020 23:45	4/30/2020 23:55	10	0.27	0.07	1485	0.001485
10	5/1/2020 0:00	5/1/2020 1:55	115	1.02	0.27	11352	0.011352
11	5/11/2020 15:50	5/11/2020 15:55	5	0.3	0.26	71	0.000071
12	5/15/2020 19:10	5/15/2020 19:35	25	0.41	0.33	17530	0.017530
13	6/6/2020 13:05	6/6/2020 13:30	25	0.14	0.14	20,107	0.020107
14	6/28/2020 13:30	6/28/2020 13:45	15	0.85	0.38	9,661	0.009661
15	6/29/2020 14:05	6/29/2020 14:30	25	0.9	0.83	26,682	0.026682
16	6/30/2020 15:45	6/30/2020 16:10	25	1.04	0.59	12,960	0.01296
17	7/3/2020 12:40	7/3/2020 14:10	90	1.08	0.48	32,891	0.032891
18	7/6/2020 18:55	7/6/2020 19:55	60	0.26	0.26	131,262	0.131262
19	7/13/2020 12:15	7/13/2020 12:40	25	0.42	0.41	25,986	0.025986
20	7/14/2020 11:30	7/14/2020 11:50	20	0.55	0.54	21,017	0.021017
21	7/22/20 17:10	7/22/2020 20:55	225	0.51	0.33	67,395	0.067395
22	7/29/2020 22:50	7/29/2020 23:10	20	0.1	0.1	23,171	0.023171
23	8/2/2020 13:45	8/2/2020 14:20	35	1.17	1.12	17,705	0.017705
24	8/17/2020 20:25	8/17/2020 20:55	30	0.51	0.5	42,580	0.042580
25	8/27/2020 13:10	8/27/2020 13:15	5	0.2	0.1	116	0.000116
26	8/29/2020 6:50	8/29/2020 7:10	20	0.72	0.57	3,571	0.003571
27	9/3/2020 0:30	9/3/2020 2:05	95	1.74	1.25	154,520	0.154520
28	9/30/2020 0:05	9/30/2020 5:55	350	0.04	0.04	105,177	0.105177
29	10/13/2020 6:45	10/13/2020 6:55	10	0.22	0.11	138	0.000138
30	11/15/2020 21:50	11/15/2020 22:00	10	0.7	0.12	757	0.000757
31	11/23/2020 7:35	11/23/2020 7:40	5	0.43	0.24	225	0.000225
32	11/26/2020 7:20	11/26/2020 7:25	5	0.95	0.33	228	0.000228
33	11/30/2020 13:35	11/30/2020 19:35	360	2.45	0.54	127,396	0.127396
34	12/5/2020 8:20	12/5/2020 14:00	340	1.85	0.25	5,287	0.005287
35	12/25/2020 1:25	12/25/2020 6:10	285	2.27	0.31	14,818	0.014818
36	12/25/2020 12:50	12/25/2020 13:50	60	0.16	0.09	2,626	0.002626





CSO 023  
2020 Activations

Total Overflow (MG): 0.925355

## CSO Event Review Holyoke, MA

### 2020 Discharge Events without precipitation at Smith's Ferry Rain Gauge

CSO	Event Start Date/Time	Event Duration (minutes)	Discharge Volume (gallons)	Precipitation Notes
CSO 018A	9/4/20 7:30	10	1,665	Residual flow from September 2-3 storm. Approximately 1.61-1.82 inches of rainfall were observed at the Highland and Springdale rain gauges between 11 PM and 5 AM. The Smith's Ferry gauge recorded 1.74 inches of rainfall between 1 AM and 3 AM on September 3rd. The WPCF rain gauge recorded 1.82 inches of rainfall on September 3rd.
CSO 018A	9/5/20 9:10	255	67,766	
CSO 018A	9/8/20 11:00	35	35,005	

**ATTACHMENT 2**

**BERKSHIRE CSO REPORT**



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
<b>Total</b>	2,546.000	4,861.280	1,356.990	50.000	129.164	40.495	38.364	104.119	60.900	182.609	24	27	25
<b>Average</b>	6.956	13.282	3.708	0.137	0.353	0.111	0.105	0.284	0.167	0.499			
<b>Maximum Day</b>	<b>12/25/2020</b>	<b>7/30/2020</b>	<b>12/25/2020</b>	<b>12/1/2020</b>	<b>12/25/2020</b>	<b>10/13/2020</b>	<b>9/3/2020</b>	<b>12/25/2020</b>	<b>12/25/2020</b>	<b>11/30/2020</b>			
	<b>18.000</b>	<b>38.050</b>	<b>13.260</b>	<b>2.500</b>	<b>18.487</b>	<b>0.994</b>	<b>11.210</b>	<b>17.687</b>	<b>11.500</b>	<b>19.470</b>			
<b>Minimum</b>	4.600	6.980	0.310	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
1/1/2020	8.700	12.85	5.460	0.00	0.000	0.236	0.000	0.00	0.0	0.000			
1/2/2020	8.500	11.61	5.330	0.00	0.100	0.031	0.000	0.00	0.0	0.000	0	0	0
1/3/2020	8.000	10.56	4.750	0.04	0.000	0.042	0.000	0.00	0.0	0.000	0	0	0
1/4/2020	10.700	23.29	4.830	0.29	0.000	0.012	0.000	0.00	0.0	0.000			
1/5/2020	8.300	10.78	5.320	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/6/2020	8.000	9.95	4.970	0.00	0.000	0.038	0.000	0.00	0.0	0.000	0	0	0
1/7/2020	7.600	10.10	4.660	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/8/2020	7.700	9.52	4.620	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/9/2020	7.000	9.14	4.130	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/10/2020	7.100	9.64	4.170	0.00	0.000	0.003	0.000	0.00	0.0	0.000	0	0	0
1/11/2020	7.300	10.53	4.120	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/12/2020	7.900	18.94	4.780	0.10	0.000	0.000	0.000	0.00	0.0	0.000			
1/13/2020	6.900	8.89	4.380	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/14/2020	7.000	9.14	3.880	0.03	0.000	0.043	0.000	0.00	0.0	0.000			
1/15/2020	7.000	9.08	3.710	0.00	0.000	0.133	0.000	0.00	0.0	0.000	0	0	0
1/16/2020	7.600	10.76	4.260	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/17/2020	6.500	8.81	4.120	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/18/2020	6.400	9.19	3.890	0.23	0.000	0.008	0.000	0.00	0.0	0.000			
1/19/2020	6.600	9.76	3.590	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/20/2020	6.500	9.24	3.700	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/21/2020	6.200	8.47	3.820	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/22/2020	6.200	8.62	3.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/23/2020	6.200	8.66	3.220	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/24/2020	6.300	8.93	3.040	0.10	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/25/2020	10.000	34.80	3.370	0.69	6.471	0.094	0.000	5.67	2.0	5.360			
1/26/2020	8.800	11.02	5.180	0.00	0.000	0.565	0.000	0.00	0.0	0.000	1	1	0
1/27/2020	7.300	10.47	4.570	0.00	0.000	0.269	0.000	0.00	0.0	0.000	0	0	0
1/28/2020	6.900	9.60	3.910	0.00	0.000	0.093	0.000	0.00	0.0	0.000	0	0	0
1/29/2020	6.600	8.93	4.410	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
1/30/2020	6.400	8.90	3.720	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
1/31/2020	6.300	8.54	3.910	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/1/2020	6.400	9.14	3.730	0.00	0.000	0.020	0.000	0.00	0.0	0.000			
2/2/2020	6.400	9.26	3.320	0.00	0.000	0.000	0.000	0.00	0.0	0.000			



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
2/3/2020	6.300	8.83	3.790	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/4/2020	6.300	9.28	3.520	0.00	0.000	0.010	0.000	0.00	0.0	0.000			
2/5/2020	6.200	8.83	3.590	0.20	0.000	0.000	0.000	0.00	0.0	0.000			
2/6/2020	8.000	11.73	3.870	0.40	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/7/2020	10.300	35.76	4.720	0.42	0.000	0.213	0.000	0.00	0.0	0.250			
2/8/2020	6.700	9.17	4.050	0.00	0.000	0.054	0.000	0.00	0.0	0.000	0	0	0
2/9/2020	6.500	9.06	3.660	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/10/2020	9.400	28.63	3.840	0.65	0.000	0.005	0.000	0.00	0.0	0.000			
2/11/2020	7.200	11.21	3.800	0.11	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/12/2020	6.600	9.23	3.640	0.37	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/13/2020	13.800	30.41	5.210	0.40	0.000	0.051	0.000	0.00	0.0	0.000			
2/14/2020	7.300	9.65	4.600	0.01	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/15/2020	6.900	9.97	4.430	0.00	0.000	0.016	0.000	0.00	0.0	0.000			
2/16/2020	6.900	9.81	4.060	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/17/2020	6.900	9.19	4.100	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/18/2020	8.800	24.32	4.100	0.28	0.000	0.008	0.000	0.00	0.0	0.000	0	0	0
2/19/2020	7.100	9.42	4.110	0.00	0.000	0.023	0.000	0.00	0.0	0.000	0	0	0
2/20/2020	6.600	8.67	4.200	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/21/2020	6.500	8.39	3.910	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/22/2020	6.500	9.03	4.030	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/23/2020	6.400	8.70	4.140	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
2/24/2020	5.400	8.93	3.820	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
2/25/2020	7.000	12.63	3.890	0.20	0.000	0.000	0.000	0.00	0.0	0.000			
2/26/2020	7.000	10.40	4.780	0.04	0.000	0.012	0.000	0.00	0.0	0.000	0	0	0
2/27/2020	11.900	34.70	4.900	0.90	5.100	0.372	0.000	4.30	3.1	6.100			
2/28/2020	7.600	10.43	5.520	0.00	0.000	0.327	0.000	0.00	0.0	0.000	0	0	0
2/29/2020	7.200	9.70	4.880	0.00	0.000	0.176	0.000	0.00	0.0	0.000			
3/1/2020	7.100	9.57	4.350	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
3/2/2020	6.900	9.39	3.940	0.00	0.000	0.094	0.000	0.00	0.0	0.000	0	0	0
3/3/2020	7.500	16.21	4.120	0.16	0.000	0.126	0.000	0.00	0.0	0.000			
3/4/2020	6.800	9.49	3.660	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/5/2020	6.500	9.11	3.860	0.00	0.000	0.006	0.000	0.00	0.0	0.000			
3/6/2020	6.500	10.49	3.750	0.01	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/7/2020	6.500	9.16	3.780	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/8/2020	6.600	9.65	3.790	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/9/2020	6.400	9.52	3.650	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/10/2020	6.500	8.69	3.620	0.03	0.000	0.000	0.000	0.00	0.0	0.000			
3/11/2020	6.500	9.05	4.160	0.00	0.000	0.014	0.000	0.00	0.0	0.000	0	0	0
3/12/2020	6.600	8.91	4.190	0.00	0.000	0.000	0.000	0.00	0.0	0.000			



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	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
3/13/2020	11.100	36.37	4.120	0.78	1.834	0.138	0.000	1.03	0.7	2.030			
3/14/2020	6.600	9.37	3.510	0.00	0.000	0.084	0.000	0.00	0.0	0.000	0	0	1
3/15/2020	6.400	8.76	3.480	0.00	0.000	0.062	0.000	0.00	0.0	0.000	0	0	0
3/16/2020	6.600	9.03	3.770	0.00	0.000	0.326	0.000	0.00	0.0	0.000	0	0	0
3/17/2020	7.000	10.34	4.480	0.00	0.000	0.439	0.000	0.00	0.0	0.000		0	
3/18/2020	6.200	8.80	3.720	0.00	0.000	0.109	0.000	0.00	0.0	0.000			
3/19/2020	11.900	33.28	4.170	0.91	2.500	0.393	0.000	1.70	1.4	2.850		0	
3/20/2020	7.700	15.24	4.880	0.08	0.000	0.290	0.000	0.00	0.0	0.000	0	0	0
3/21/2020	6.700	8.63	4.680	0.00	0.000	0.148	0.000	0.00	0.0	0.000	0	0	0
3/22/2020	6.800	9.89	4.110	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/23/2020	8.300	15.38	4.320	0.45	0.000	0.158	0.000	0.00	0.0	0.000	0	0	0
3/24/2020	12.600	28.00	7.910	0.00	0.000	0.204	0.000	0.00	0.0	0.400	0	0	0
3/25/2020	8.000	10.49	5.620	0.00	0.000	0.310	0.000	0.00	0.0	0.000	0	0	0
3/26/2020	7.300	9.97	4.680	0.00	0.000	0.008	0.000	0.00	0.0	0.000			
3/27/2020	7.100	9.31	4.460	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
3/28/2020	8.600	27.34	4.020	0.37	0.000	0.014	0.000	0.00	0.0	0.000			
3/29/2020	13.700	34.01	8.300	0.88	0.000	0.046	0.000	0.00	0.0	0.000			
3/30/2020	9.300	25.58	5.800	0.13	0.000	0.038	0.000	0.00	0.0	0.040	0	0	1
3/31/2020	8.100	10.39	5.880	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
4/1/2020	7.900	10.71	5.690	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
4/2/2020	8.300	16.08	5.320	0.15	0.000	0.022	0.000	0.00	0.0	0.000			
4/3/2020	9.600	15.73	5.810	0.15	0.000	0.000	0.000	0.00	0.0	0.000			
4/4/2020	7.700	9.53	5.380	0.00	0.000	0.019	0.000	0.00	0.0	0.000	0	0	0
4/5/2020	7.500	9.92	4.560	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
4/6/2020	7.200	9.24	5.050	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
4/7/2020	7.200	9.82	5.190	0.15	0.000	0.000	0.000	0.00	0.0	0.000			
4/8/2020	7.800	10.07	5.620	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
4/9/2020	10.500	36.39	4.110	0.50	0.000	0.017	0.000	0.00	0.0	1.190			
4/10/2020	7.700	10.38	5.700	0.02	0.000	0.270	0.000	0.00	0.0	0.000	1	1	1
4/11/2020	7.200	9.41	4.800	0.00	0.000	0.489	0.000	0.00	0.0	0.000			
4/12/2020	6.700	8.98	4.240	0.00	0.000	0.299	0.000	0.00	0.0	0.000			
4/13/2020	14.700	35.76	4.330	1.58	11.592	0.106	0.000	10.79	5.6	11.790			
4/14/2020	10.300	12.67	7.750	0.01	0.000	0.243	0.000	0.00	0.0	0.000	1	1	1
4/15/2020	9.400	12.50	6.560	0.00	0.000	0.472	0.000	0.00	0.0	0.000	0	0	0
4/16/2020	8.800	11.05	6.320	0.00	0.000	0.237	0.000	0.00	0.0	0.000			
4/17/2020	8.500	10.60	5.850	0.00	0.000	0.101	0.000	0.00	0.0	0.000	0	0	0
4/18/2020	12.500	21.47	7.000	0.46	0.000	0.370	0.000	0.00	0.0	0.000			
4/19/2020	8.200	10.85	5.940	0.00	0.000	0.026	0.000	0.00	0.0	0.000	0	0	0
4/20/2020	8.000	10.11	5.500	0.00	0.000	0.023	0.000	0.00	0.0	0.000	0	0	0



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
4/21/2020	10.200	35.70	5.330	0.64	1.717	0.000	0.000	0.92	0.5	2.640	0	0	0
4/22/2020	8.300	10.92	5.570	0.00	0.000	0.225	0.000	0.00	0.0	0.000	1	1	1
4/23/2020	7.600	10.49	5.160	0.10	0.000	0.433	0.000	0.00	0.0	0.000			
4/24/2020	9.100	18.47	4.840	0.24	0.000	0.262	0.000	0.00	0.0	0.000			
4/25/2020	7.200	9.53	4.380	0.00	0.000	0.056	0.000	0.00	0.0	0.000	0	0	0
4/26/2020	9.100	25.16	4.580	0.35	0.000	0.000	0.000	0.00	0.0	0.000			
4/27/2020	10.000	23.30	5.920	0.57	0.000	0.018	0.000	0.00	0.0	0.000	0	0	0
4/28/2020	7.700	9.97	4.910	0.01	0.000	0.027	0.000	0.00	0.0	0.000	0	0	0
4/29/2020	7.100	10.12	4.830	0.00	0.000	0.106	0.000	0.00	0.0	0.000	0	0	0
4/30/2020	13.100	33.00	4.290	0.20	0.000	0.176	0.000	0.00	0.0	0.800			
5/1/2020	15.200	36.40	7.100	1.50	8.889	0.529	0.000	8.09	4.0	9.889			
5/2/2020	10.900	13.16	8.820	0.02	0.000	0.521	0.000	0.00	0.0	0.000	1	1	0
5/3/2020	9.900	12.61	7.530	0.00	0.000	0.231	0.000	0.00	0.0	0.000	0	0	0
5/4/2020	9.300	11.89	6.470	0.00	0.000	0.132	0.000	0.00	0.0	0.000	0	0	0
5/5/2020	8.800	11.10	6.380	0.00	0.000	0.175	0.000	0.00	0.0	0.000			
5/6/2020	8.300	10.96	5.480	0.00	0.000	0.004	0.000	0.00	0.0	0.000			
5/7/2020	8.000	10.71	5.620	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
5/8/2020	8.000	12.99	5.090	0.16	0.000	0.000	0.000	0.00	0.2	0.200	0	0	0
5/9/2020	8.100	10.90	5.320	0.06	0.000	0.011	0.000	0.00	0.0	0.000			
5/10/2020	7.500	18.65	4.980	0.00	0.000	0.006	0.000	0.00	0.0	0.000			
5/11/2020	8.500	29.99	4.550	0.37	0.000	0.114	0.000	0.00	0.0	0.000	0	0	0
5/12/2020	7.200	12.65	3.970	0.00	0.000	0.080	0.000	0.00	0.0	0.000	0	0	0
5/13/2020	6.600	9.96	4.270	0.00	0.000	0.005	0.000	0.00	0.0	0.000	0	0	0
5/14/2020	6.300	9.11	3.940	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
5/15/2020	8.400	35.96	4.130	0.65	1.486	0.070	2.060	0.69	0.7	4.650			
5/16/2020	6.400	10.10	3.580	0.00	0.000	0.475	0.000	0.00	0.0	0.000	1	1	1
5/17/2020	6.400	8.52	4.790	0.00	0.000	0.220	0.000	0.00	0.0	0.000			
5/18/2020	6.300	8.32	3.440	0.03	0.000	0.095	0.000	0.00	0.0	0.000	0	0	0
5/19/2020	7.400	19.92	3.780	0.00	0.000	0.053	0.000	0.00	0.0	0.000			
5/20/2020	6.300	10.70	3.600	0.00	0.000	0.059	0.000	0.00	0.0	0.000			
5/21/2020	5.800	11.61	2.240	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	1
5/22/2020	5.800	7.59	3.600	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
5/23/2020	5.600	8.17	3.050	0.02	0.000	0.000	0.000	0.00	0.0	0.000			
5/24/2020	5.500	7.80	3.500	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
5/25/2020	5.600	7.97	3.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
5/26/2020	5.800	8.56	3.090	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
5/27/2020	5.800	7.75	3.700	0.00	0.000	0.100	0.000	0.00	0.0	0.000	0	0	0
5/28/2020	5.800	8.23	2.970	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
5/29/2020	5.700	7.99	3.090	0.01	0.000	0.004	0.000	0.00	0.0	0.000	0	0	0



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
5/30/2020	5.500	7.97	3.280	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
5/31/2020	5.300	7.75	2.690	0.00	0.000	0.000	0.000	0.00		0.000			
6/1/2020	5.300	7.66	3.050	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/2/2020	5.400	7.56	2.940	0.05	0.000	0.000	0.000	0.00	0.0	0.000			
6/3/2020	5.500	8.11	2.740	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/4/2020	5.400	7.93	2.980	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/5/2020	5.700	7.94	2.870	0.04	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/6/2020	7.200	32.77	1.700	0.65	2.280	0.129	0.000	1.48	0.5	4.480	0	0	0
6/7/2020	6.000	9.16	3.010	0.00	0.000	0.468	0.000	0.00	0.0	0.000	1	1	1
6/8/2020	5.600	8.20	3.230	0.00	0.000	0.208	0.000	0.00	0.0	0.000	0	0	0
6/9/2020	5.300	7.55	2.890	0.00	0.000	0.103	0.000	0.00	0.0	0.000			
6/10/2020	5.300	8.32	2.780	0.00	0.000	0.030	0.000	0.00	0.0	0.000	0	0	0
6/11/2020	7.000	29.94	2.930	0.27	0.000	0.000	0.000	0.00	0.0	0.000			
6/12/2020	5.300	7.68	3.010	0.00	0.000	0.022	0.000	0.00	0.0	0.000	1	1	1
6/13/2020	5.000	7.76	2.920	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/14/2020	5.200	7.30	2.560	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/15/2020	5.300	7.79	3.370	0.00	0.000	0.014	0.000	0.00	0.0	0.000	0	0	0
6/16/2020	5.200	8.53	2.770	0.00	0.000	0.028	0.000	0.00	0.0	0.000			
6/17/2020	5.100	7.73	2.920	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/18/2020	5.200	7.77	2.600	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/19/2020	5.100	7.01	3.050	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/20/2020	5.000	7.32	2.600	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/21/2020	4.900	7.67	2.700	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/22/2020	5.100	7.32	1.530	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/23/2020	5.200	7.55	2.570	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
6/24/2020	5.200	7.70	2.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/25/2020	5.100	7.50	2.910	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0		
6/26/2020	5.100	7.08	2.570	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
6/27/2020	6.800	23.40	2.660	0.29	0.000	0.000	0.000	0.00	0.0	0.000			
6/28/2020	8.700	33.53	2.620	0.90	1.280	0.204	0.000	0.48	0.3	1.400	0	0	0
6/29/2020	7.800	33.32	2.690	0.40	1.800	0.312	0.000	1.00	0.2	1.510	1	1	1
6/30/2020	7.400	16.88	3.610	0.12	0.000	0.532	0.000	0.00	0.0	0.000	1	1	1
7/1/2020	5.900	8.57	3.370	0.02	0.000	0.384	0.000	0.00	0.0	0.000	0	0	0
7/2/2020	5.300	7.11	3.380	0.00	0.000	0.139	0.000	0.00	0.0	0.000	0	0	0
7/3/2020	8.500	31.21	2.950	0.85	3.287	0.212	0.000	2.49	1.8	3.770			
7/4/2020	5.800	8.02	3.520	0.00	0.000	0.473	0.000	0.00	0.0	0.000	0	1	0
7/5/2020	5.400	7.42	3.060	0.00	0.000	0.185	0.000	0.00	0.0	0.000			
7/6/2020	6.900	33.69	2.620	1.20	1.449	0.326	0.000	0.65	0.7	5.990	0	0	0
7/7/2020	6.400	8.69	3.050	0.00	0.000	0.453	0.000	0.00	0.0	0.000	0	1	1





Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
7/8/2020	6.000	8.61	3.350	0.02	0.000	0.375	0.000	0.00	0.0	0.000			
7/9/2020	5.500	8.45	3.030	0.00	0.000	0.120	0.000	0.00	0.0	0.000	0	0	0
7/10/2020	5.800	10.22	2.950	0.03	0.000	0.020	0.000	0.00	0.0	0.000	0	0	0
7/11/2020	6.300	11.61	3.880	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
7/12/2020	5.400	7.94	2.890	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
7/13/2020	6.100	19.08	2.740	0.07	0.000	0.006	0.000	0.00	0.0	0.000	0	0	0
7/14/2020	6.700	30.79	3.030	0.45	0.828	0.189	0.000	0.03	0.1	1.250	0	0	0
7/15/2020	5.900	8.78	2.890	0.02	0.000	0.404	0.000	0.00	0.0	0.000	1	1	1
7/16/2020	5.600	8.57	3.040	0.00	0.000	0.307	0.000	0.00	0.0	0.000			
7/17/2020	6.100	16.25	3.180	0.04	0.000	0.169	0.000	0.00	0.0	0.000	0	0	0
7/18/2020	5.200	7.94	2.370	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
7/19/2020	5.100	8.14	2.840	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
7/20/2020	5.400	8.07	2.920	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
7/21/2020	5.200	7.84	2.230	0.00	0.000	0.001	0.000	0.00	0.0	0.000	1	1	1
7/22/2020	7.900	33.91	2.270	1.05	1.402	0.134	6.443	0.60	0.3	8.800			
7/23/2020	6.900	17.11	3.730	0.05	0.000	0.473	0.000	0.00	0.0	0.000			
7/24/2020	5.800	8.58	3.320	0.00	0.000	0.390	0.000	0.00	0.0	0.000	0	0	0
7/25/2020	5.500	7.99	3.280	0.00	0.000	0.152	0.000	0.00	0.0	0.000			
7/26/2020	5.300	7.74	2.480	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
7/27/2020	5.500	8.34	2.910	0.00	0.000	0.103	0.000	0.00	0.0	0.000	0	0	0
7/28/2020	5.400	8.12	2.710	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
7/29/2020	5.200	10.38	3.110	0.33	0.000	0.029	0.000	0.00	0.0	0.000			
7/30/2020	7.200	38.05	3.600	0.00	0.000	0.371	0.000	0.00	0.0	0.930	1	1	1
7/31/2020	5.500	8.24	2.490	0.00	0.000	0.342	0.000	0.00	0.0	0.000	0	0	0
8/1/2020	5.300	8.14	3.000	0.00	0.000	0.169	0.000	0.00	0.0	0.000			
8/2/2020	7.600	36.46	2.430	1.00	1.170	0.312	4.326	0.37	0.3	5.450			
8/3/2020	6.000	8.65	3.620	0.05	0.000	0.454	0.000	0.00	0.0	0.000	1	1	1
8/4/2020	7.500	35.55	2.930	0.30	0.000	0.236	0.000	0.00	0.0	0.000			
8/5/2020	6.000	9.90	2.000	0.00	0.000	0.156	0.000	0.00	0.0	0.000	0	0	1
8/6/2020	5.800	8.48	3.200	0.00	0.000	0.014	0.000	0.00	0.0	0.000			
8/7/2020	5.600	8.47	3.060	0.11	0.000	0.017	0.000	0.00	0.0	0.000	0	0	0
8/8/2020	5.200	8.33	2.930	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
8/9/2020	5.600	9.04	2.950	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
8/10/2020	5.400	8.65	2.800	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
8/11/2020	5.300	7.87	3.240	0.02	0.000	0.000	0.000	0.00	0.0	0.000			
8/12/2020	5.300	8.56	2.390	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
8/13/2020	5.300	8.32	2.900	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
8/14/2020	5.200	7.59	2.710	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
8/15/2020	5.200	8.06	2.790	0.00	0.000	0.000	0.000	0.00	0.0	0.000			



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
8/16/2020	5.400	8.29	2.970	0.04	0.000	0.000	0.000	0.00	0.0	0.000			
8/17/2020	6.400	34.73	2.800	0.45	0.500	0.028	0.000	0.00	0.0	1.680			
8/18/2020	5.800	8.13	3.250	0.00	0.000	0.354	0.000	0.00	0.0	0.000	1	1	0
8/19/2020	6.700	31.70	3.300	0.30	0.340	0.373	0.000	0.00	0.1	0.910	0	0	0
8/20/2020	5.600	8.64	2.910	0.00	0.000	0.285	0.000	0.00	0.0	0.000	0	1	1
8/21/2020	5.800	9.24	2.930	0.00	0.000	0.213	0.000	0.00	0.0	0.000			
8/22/2020	5.200	8.05	2.600	0.00	0.000	0.097	0.000	0.00	0.0	0.000			
8/23/2020	6.000	33.23	2.120	0.25	0.616	0.036	0.000	0.00	0.0	0.620			
8/24/2020	5.900	8.41	3.030	0.01	0.000	0.455	0.000	0.00	0.0	0.000	0	0	1
8/25/2020	5.600	8.09	2.990	0.00	0.000	0.256	0.000	0.00	0.0	0.000			
8/26/2020	5.300	24.30	0.310	0.00	0.000	0.120	0.000	0.00	0.0	0.000	0	0	0
8/27/2020	6.700	22.94	2.280	0.20	0.000	0.018	0.000	0.00	0.0	0.000			
8/28/2020	6.800	12.12	2.570	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
8/29/2020	8.200	32.10	2.610	0.60	1.442	0.244	0.000	0.64	0.3	1.500			
8/30/2020	5.500	8.94	2.950	0.00	0.000	0.384	0.000	0.00	0.0	0.000	1	1	0
8/31/2020	5.500	8.08	3.060	0.00	0.179	0.329	0.000	0.00	0.0	0.000	0	0	0
9/1/2020	5.300	7.50	3.070	0.00	0.000	0.148	0.000	0.00	0.0	0.000			
9/2/2020	6.800	27.04	2.590	0.00	0.000	0.035	0.000	0.00	0.0	0.000			
9/3/2020	9.700	33.53	4.430	1.82	3.307	0.491	11.210	2.51	1.2	12.800	1	1	1
9/4/2020	5.900	8.44	3.250	0.00	0.000	0.427	0.000	0.00	0.0	0.000	0	0	0
9/5/2020	5.400	8.50	2.950	0.00	0.000	0.126	0.000	0.00	0.0	0.000			
9/6/2020	5.100	8.11	2.710	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/7/2020	5.400	8.33	2.390	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/8/2020	5.400	8.33	2.280	0.00	0.000	0.026	0.000	0.00	0.0	0.000	0	0	0
9/9/2020	5.500	8.16	2.390	0.00	0.000	0.013	0.000	0.00	0.0	0.000	0	0	0
9/10/2020	7.100	33.31	2.140	0.11	0.110	0.022	0.000	0.00	0.0	0.120			
9/11/2020	5.300	8.17	2.950	0.00	0.000	0.117	0.000	0.00	0.0	0.000	1	1	0
9/12/2020	6.000	10.38	3.300	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/13/2020	5.100	7.97	2.860	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/14/2020	5.200	8.12	2.390	0.00	0.000	0.005	0.000	0.00	0.0	0.000			
9/15/2020	5.200	7.87	2.650	0.00	0.000	0.017	0.000	0.00	0.0	0.000	0	0	0
9/16/2020	5.400	9.58	2.610	0.00	0.000	0.022	0.000	0.00	0.0	0.000	0	0	0
9/17/2020	5.700	8.85	2.540	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/18/2020	5.300	8.17	2.890	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
9/19/2020	5.700	9.93	2.500	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/20/2020	4.900	8.41	2.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/21/2020	5.500	13.02	2.290	0.00	0.000	0.009	0.000	0.00	0.0	0.000	0	0	0
9/22/2020	5.200	8.92	2.180	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
9/23/2020	5.100	13.10	2.010	0.00	0.000	0.000	0.000	0.00	0.0	0.000			



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
9/24/2020	4.900	7.42	2.340	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
9/25/2020	4.800	6.98	2.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
9/26/2020	4.800	7.88	2.010	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/27/2020	4.900	8.21	2.290	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
9/28/2020	5.200	13.46	2.500	0.04	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
9/29/2020	6.000	15.62	2.410	0.95	0.000	0.002	0.000	0.00	0.0	0.000			
9/30/2020	10.600	26.38	6.340	0.54	5.294	0.517	6.429	4.49	2.9	10.100	1	1	1
10/1/2020	5.600	8.10	2.940	0.02	0.000	0.374	0.000	0.00	0.0	0.000			
10/2/2020	5.900	12.03	2.550	0.17	0.000	0.222	0.000	0.00	0.0	0.000	0	0	0
10/3/2020	5.300	7.88	2.730	0.00	0.000	0.082	0.000	0.00	0.0	0.000			
10/4/2020	5.200	7.91	2.240	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
10/5/2020	5.200	8.08	2.420	0.00	0.000	0.010	0.000	0.00	0.0	0.000	0	0	0
10/6/2020	5.500	9.79	2.390	0.12	0.000	0.009	0.000	0.00	0.0	0.000			
10/7/2020	5.700	20.77	2.480	0.12	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
10/8/2020	4.900	8.59	2.450	0.00	0.000	0.000	0.000	0.00	0.0	0.000			1
10/9/2020	4.600	6.99	2.900	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
10/10/2020	5.000	7.61	3.100	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
10/11/2020	4.900	8.08	1.980	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
10/12/2020	5.600	10.40	2.670	0.37	0.000	0.000	0.000	0.00	0.0	0.000			
10/13/2020	14.600	35.17	3.200	1.20	4.290	0.994	0.000	3.49	2.1	5.060			
10/14/2020	6.300	8.30	3.730	0.00	0.000	0.482	0.000	0.00	0.0	0.000	0	1	1
10/15/2020	5.500	7.30	3.090	0.00	0.000	0.337	0.000	0.00	0.0	0.000			
10/16/2020	10.300	30.75	3.190	1.40	4.923	0.265	0.000	4.12	2.4	4.890			
10/17/2020	11.300	22.54	4.520	0.45	4.146	0.270	0.000	3.35	3.0	4.820	0	0	0
10/18/2020	5.900	9.15	2.870	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
10/19/2020	5.900	8.44	2.430	0.00	0.000	0.327	0.000	0.00	0.0	0.000	0	0	0
10/20/2020	6.000	9.35	2.860	0.01	0.000	0.377	0.000	0.00	0.0	0.000			
10/21/2020	5.600	8.60	2.520	0.01	0.000	0.064	0.000	0.00	0.0	0.000			
10/22/2020	5.000	8.19	2.580	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
10/23/2020	4.900	8.12	1.790	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
10/24/2020	5.200	8.12	3.020	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
10/25/2020	5.400	8.60	2.870	0.01	0.000	0.000	0.000	0.00	0.0	0.000			
10/26/2020	6.500	16.20	3.050	0.21	0.000	0.008	0.000	0.00	0.0	0.000	0	0	0
10/27/2020	5.300	8.07	2.380	0.05	0.000	0.000	0.000	0.00	0.0	0.000			
10/28/2020	9.200	31.68	2.590	0.40	0.000	0.024	0.000	0.00	0.0	0.000			
10/29/2020	13.800	36.96	2.470	1.01	2.144	0.175	0.000	1.34	0.9	2.640	0	0	0
10/30/2020	10.400	22.41	5.630	0.46	0.000	0.502	0.000	0.00	0.0	0.000	0	0	1
10/31/2020	6.800	10.65	3.910	0.00	0.000	0.391	0.000	0.00	0.0	0.000			
11/1/2020	9.200	36.09	2.970	0.33	0.000	0.068	0.000	0.00	0.0	0.000			



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
11/2/2020	6.400	8.98	3.330	0.01	0.000	0.132	0.000	0.00	0.0	0.000	0	0	0
11/3/2020	5.900	8.61	2.820	0.01	0.000	0.004	0.000	0.00	0.0	0.000			
11/4/2020	5.700	8.42	3.000	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
11/5/2020	5.600	8.38	2.820	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
11/6/2020	5.200	7.71	2.870	0.00	0.000	0.023	0.000	0.00	0.0	0.000	0	0	0
11/7/2020	5.100	8.28	2.790	0.00	0.000	0.094	0.000	0.00	0.0	0.000			
11/8/2020	5.100	8.07	2.330	0.00	0.000	0.022	0.000	0.00	0.0	0.000			
11/9/2020	5.200	8.07	2.370	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
11/10/2020	5.100	7.74	2.650	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
11/11/2020	6.500	20.04	2.360	0.26	0.000	0.000	0.000	0.00	0.0	0.000			
11/12/2020	5.400	8.20	2.930	0.05	0.000	0.000	0.000	0.00	0.0	0.000			
11/13/2020	6.100	15.44	2.680	0.15	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
11/14/2020	5.500	8.82	2.550	0.00	0.000	0.018	0.000	0.00	0.0	0.000			
11/15/2020	7.500	36.23	2.820	0.58	1.881	0.041	0.000	1.08	0.6	1.250			
11/16/2020	6.500	11.28	3.050	0.00	0.000	0.448	0.000	0.00	0.0	0.000	1	1	0
11/17/2020	5.500	8.10	2.690	0.02	0.000	0.301	0.000	0.00	0.0	0.000			
11/18/2020	5.400	8.82	2.700	0.00	0.000	0.200	0.000	0.00	0.0	0.000	0	0	0
11/19/2020	5.200	12.43	2.390	0.00	0.000	0.017	0.000	0.00	0.0	0.000			
11/20/2020	5.100	8.51	2.430	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
11/21/2020	5.000	8.62	2.430	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
11/22/2020	5.000	8.20	2.440	0.07	0.000	0.000	0.000	0.00	0.0	0.000			
11/23/2020	9.000	36.81	2.330	0.70	3.281	0.136	0.000	2.48	1.7	3.650	1	1	0
11/24/2020	5.900	8.81	2.510	0.00	0.000	0.542	0.000	0.00	0.0	0.000	0	0	0
11/25/2020	5.800	7.96	3.240	0.00	0.000	0.337	0.000	0.00	0.0	0.000	0	0	0
11/26/2020	11.400	36.24	2.780	0.80	2.130	0.548	0.000	1.33	0.7	2.740			
11/27/2020	6.400	9.87	3.820	0.03	0.000	0.701	0.000	0.00	0.0	0.000	1	0	0
11/28/2020	5.500	8.98	2.770	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
11/29/2020	5.400	8.62	2.690	0.00	0.000	0.120	0.000	0.00	0.0	0.000			
11/30/2020	12.800	36.12	2.730	2.11	13.869	0.088	7.896	13.07	6.4	19.470			
12/1/2020	11.500	13.71	8.140	2.50	0.000	0.759	0.000	0.00	0.0	0.000	1	1	1
12/2/2020	8.400	11.25	6.380	0.00	0.000	0.253	0.000	0.00	0.0	0.000			
12/3/2020	7.500	10.62	3.930	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/4/2020	7.000	10.43	3.970	0.01	0.000	0.057	0.000	0.00	0.0	0.000			
12/5/2020	15.800	35.39	3.690	1.63	9.040	0.547	0.000	8.24	4.7	9.670			
12/6/2020	10.400	14.03	6.650	0.00	0.000	0.547	0.000	0.00	0.0	0.000	0	0	0
12/7/2020	8.700	11.71	5.320	0.00	0.000	0.251	0.000	0.00	0.0	0.000	0	0	0
12/8/2020	8.100	11.97	4.560	0.00	0.000	0.146	0.000	0.00	0.0	0.000			
12/9/2020	7.600	10.61	4.570	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/10/2020	7.500	10.68	4.850	0.00	0.000	0.000	0.000	0.00	0.0	0.000			



Date	2	4	5	901	4343	4344	4345	4346	4347	4582	4264	4266	4267
	WPCF EFFLUENT FLOW Total	WPCF EFFLUENT FLOW Max	WPCF EFFLUENT FLOW Min	WPCF RAINFALL	CSO#9 INFLUENT FLOW	CSO#9 RETURN TO WPCF	CSO#9 BYPASS TO RIVER	CSO#9 TREATED TO RIVER	CSO#9 EVENT DURATION	SOUTH ST TO CSO#9 FLOW	CSO#2 PROVIDENCE HOSPITAL	CSO#7 NORTHAMPTON /GLENN ST	CSO#8 SPRINGDALE PARK
	MGD	MGD	MGD	INCHES	MGD	MGD	MGD	MGD	HOURS	MGD	#ACT	#ACT	#ACT
12/11/2020	7.200	9.71	3.860	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/12/2020	7.000	13.62	3.840	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/13/2020	6.700	10.60	3.780	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/14/2020	7.100	12.35	3.510	0.00	0.000	0.015	0.000	0.00	0.0	0.000	0	0	0
12/15/2020	6.400	8.78	3.570	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/16/2020	6.200	8.92	3.340	1.33	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/17/2020	6.300	9.02	3.820	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/18/2020	6.100	9.05	3.640	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/19/2020	6.300	9.25	3.140	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/20/2020	6.400	9.52	3.290	0.10	0.000	0.000	0.000	0.00	0.0	0.000			
12/21/2020	6.300	9.25	3.350	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/22/2020	6.100	9.20	3.280	0.00	0.000	0.000	0.000	0.00	0.0	0.000			
12/23/2020	6.000	9.57	2.830	0.00	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/24/2020	7.400	16.63	2.800	0.02	0.000	0.000	0.000	0.00	0.0	0.000	0	0	0
12/25/2020	18.000	36.05	13.260	2.27	18.487	0.290	0.000	17.69	11.5	18.920			
12/26/2020	12.800	18.59	9.030	0.00	0.000	0.665	0.000	0.00	0.0	0.000	1	1	0
12/27/2020	11.700	15.80	8.210	0.00	0.000	0.690	0.000	0.00	0.0	0.000	0	0	0
12/28/2020	9.600	12.79	6.670	0.00	0.000	0.313	0.000	0.00	0.0	0.000	0	0	0
12/29/2020	8.600	11.10	5.520	0.00	0.000	0.039	0.000	0.00	0.0	0.000			
12/30/2020	8.300	11.37	4.910	0.00	0.000	0.094	0.000	0.00	0.0	0.000	0	0	0
<b>Total</b>	2,546.000	4,861.280	1,356.990	50.000	129.164	40.495	38.364	104.119	60.900	182.609	24	27	25
<b>Average</b>	6.956	13.282	3.708	0.137	0.353	0.111	0.105	0.284	0.167	0.499			
<b>Maximum Day</b>	<b>12/25/2020</b>	<b>7/30/2020</b>	<b>12/25/2020</b>	<b>12/1/2020</b>	<b>12/25/2020</b>	<b>10/13/2020</b>	<b>9/3/2020</b>	<b>12/25/2020</b>	<b>12/25/2020</b>	<b>11/30/2020</b>			
	<b>18.000</b>	<b>38.050</b>	<b>13.260</b>	<b>2.500</b>	<b>18.487</b>	<b>0.994</b>	<b>11.210</b>	<b>17.687</b>	<b>11.500</b>	<b>19.470</b>			
<b>Minimum</b>	4.600	6.980	0.310	0.000	0.000	0.000	0.000	0.000	0.000	0.000			





















WTF

T DATA SUMMARY

4268	4269	4271	4273	4272	4274	4275	4276	4277	4296	4278	4295
CSO#9 BERKSHIRE STREET	CSO#11 JACKSON STREET	CSO#16 FRONT/ APPLETON ST	CSO#18 WALNUT STREET	CSO#18A ESSEX/ WALNUT ST	CSO#18B HIGHLAND PARK	CSO#19 YALE STREET	CSO#20 CLEVELAND STREET	CSO#21 RIVER TERRACE	CSO#21B RIVER TERRACE-B	CSO#23 JEFFERSON STREET	SUEZ OPERATOR /EMPLOYEE
#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	#ACT	NAME
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Danek
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Pedrosa
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Robinson
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Robinson
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Lorenzana
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Robinson
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	Flores
1	0	0	1	1	1	0.00	1.00	1.00	1.00	1.00	Pedrosa
0	0	0	0	0	0	0.00	1.00	0.00	1.00	0.00	Lorenzana
0	1	0	0	0	0	0.00	1.00	0.00	0.00	0.00	Robinson
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	lorenzana
40	27	25	53	46	37	24	58	35	45	25	