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October 30, 2020

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Chief, Environmental Enforcement Section Environmental and Natural Resources Division U.S. Department of Justice Post Office Box 7611 Washington, DC 20044-7611

Subject:

Quarterly Report 60

Civil Action No. 3:08-cv-00608-CRS

Attention Director and Chiefs:

Please find attached our Quarterly Report, prepared in accordance with Paragraph 29 of our Amended Consent Decree. This report is for the period July 1, 2020 - September 30, 2020, pertaining to Consent Decree compliance activities. Included are sections on Project WIN activities related to: NMC, SORP, Discharge Abatement Plans, Public Outreach, Education, Notification and Participation, CMOM and Performance Overview.

I certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 540-6136.

Sincerely

Angela Akridge, PE

Louisville MSD Chief Strategic Officer

CC:

James A. Parrott Jacquelyn Quarles

File

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# Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #60



## **Reporting Period:**

July 1, 2020 through September 30, 2020

## **Submitted To:**

Kentucky Department of Environmental Protection
United States Environmental Protection Agency
United States Department of Justice

## Submitted By:

Louisville and Jefferson County Metropolitan Sewer District
700 W. Liberty Street
Louisville, Kentucky 40203-1911

## **Submittal Date:**

October 30, 2020



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### INTRODUCTION

The Louisville and Jefferson County Metropolitan Sewer District (MSD) is currently under an Amended Consent Decree with the Kentucky Department of Environmental Protection (KDEP), the United States Environmental Protection Agency (EPA), and the United States Department of Justice. The Amended Consent Decree was signed by United States District Judge Simpson on April 10, 2009 and filed in United States District Court, Western Division of Kentucky, Louisville Division, on April 15, 2009.

### **Quarterly Reporting Period**

This is the Sixtieth Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from July 1, 2020, through September 30, 2020. The structure for this report is outlined as follows:

Section 1: Project Waterway Improvements Now (WIN) Performance Overview – This section provides an accounting of unauthorized discharges from the separate sanitary and combined sewer systems, and the estimated volumes along with performance information on bypasses at WQTCs. A discussion of the probable reductions in both unauthorized discharge points and the discharges from MSD's Combined Sewer Overflow (CSO) locations, identified in the Morris Forman Water Quality Treatment Center Kentucky Pollutant Discharge Elimination System (KPDES) permit, that are expected to result from MSD's projects and activities during the reporting period are also contained in this section.

Section 2: Program Activities for Nine Minimum Controls (NMC)—This section describes the data collected for NMC 2 — Maximization of Storage in the Collection System, and NMC 4 — Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC) that were active during the reporting period.

Section 3: Program Activities for Sewer Overflow Response Protocol (SORP) – This section describes the training attendance records, overflow data, and overflow reconnaissance inspection routes related to SORP that were active during the reporting period.

Section 4: Program Activities for Discharge Abatement Plans (DAP) – This section describes the schedule and status for projects related to the DAP by means of an updated Gantt chart for active DAP projects during the reporting period. This section also includes the anticipated projects and activities that are scheduled for continued compliance with the Amended Consent Decree.

Section 5: Program Activities For Public Outreach, Education, Notification and Participation – This section describes the activities related to public outreach that were active during the reporting period.

Section 6: Capacity Management Operations and Maintenance (CMOM) Report – The CMOM program activities and programmatic activities for WQTCs generating capital projects are reported in a Gantt chart for the reporting period. This section also includes the schedule for activities planned for the next reporting period for continued compliance with the Amended Consent Decree.



## SECTION 1: PROJECT WATERWAY IMPROVEMENTS NOW (WIN) PERFORMANCE OVERVIEW

## 1.1. COMBINED SEWER OVERFLOW REDUCTION AND SANITARY SEWER OVERFLOW ABATEMENT ACTIVITIES

The following sections outline the activities performed during the reporting period to reduce or control CSOs and eliminate SSOs.

#### 1.1.1. SANITARY SEWER OVERFLOW ELIMINATION ACTIVITIES

Refer to Section 4.4.1 for Final SSDP project updates.

#### 1.1.2. COMBINED SEWER OVERFLOW REDUCTION AND CONTROL ACTIVITIES

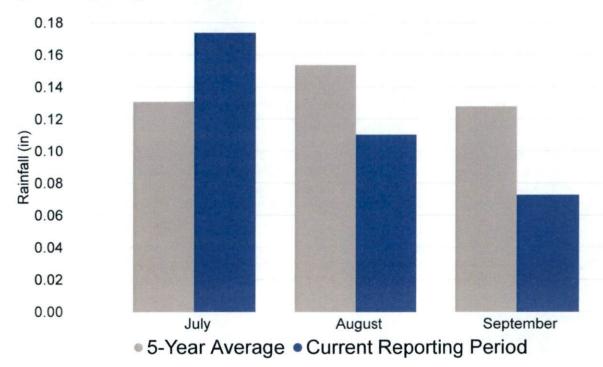
Refer to Section 4.4.2 for CSO LTCP project updates.

#### 1.2. Systemwide Performance

#### 1.2.1. RAINFALL

The number and the volume of wet weather overflows are directly related to the amount of rain that has fallen during the reporting period. Figure 1.1 shows the service area daily average rainfall amounts for each month of the last quarter, compared with the average of the daily average rainfall for the previous five years. Data was pulled from MSD's rain gauge network. Daily average rainfall was above average for July and below average for August and September when compared with the previous 5-year average for these months.





## 1.3. WATER QUALITY TREATMENT CENTER PERFORMANCE

#### 1.3.1. BYPASSES

There were zero bypass events that occurred during this reporting period. Any details are included in Appendix A-1. Each quarter when bypasses occur, an assessment of bypasses is conducted to determine root cause of the bypass, the failure category, corrective actions to be taken, possible programmatic solutions, and corrective action completion date.

#### 1.3.2. JEFFERSONTOWN WATER QUALITY TREATMENT CENTER

A letter dated December 23, 2015, certified the elimination of Jeffersontown WQTC. Inspections were conducted upstream of what was previously Jeffersontown WQTC Headworks during the reporting period. There were no overflows reported as a result of these inspections. Refer to Section 3.2 for SSO Route information.

#### 1.3.3. PHOSPHORUS MONITORING AT THE PROSPECT WQTCs

An elimination plan for the five WQTCs serving Prospect (Timberlake, Hunting Creek North, Hunting Creek South, Ken Carla, and Shadow Wood) was submitted to EPA/KDEP on March 31, 2009. Approval of this plan was received on September 24, 2009, and work is now complete. A certification letter dated December 15, 2015, was submitted finalizing the completion of the project.

## 1.4. COMBINED SEWER OVERFLOW PERFORMANCE

#### 1.4.1. AUTHORIZED DISCHARGES - WET WEATHER CSOS

The observed CSO data for the reporting period for each monitored overflow has been tabulated, along with rainfall information from the nearest rain gauge to facilitate review of the overflows that occurred. This data is included as Appendix B.

#### 1.4.2. UNAUTHORIZED DISCHARGES - DRY WEATHER CSOS

There were no dry weather overflow reported at a CSO during the reporting period. Any details are included in Appendix A-2. MSD records information related to dry weather overflows from permitted combined sewer overflow outfalls. This information is entered and maintained in IPS utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. A detailed report of these overflows will be included in the Annual Report for the current reporting period.

### 1.5. COLLECTION SYSTEM OVERFLOW PERFORMANCE

### 1.5.1. UNAUTHORIZED DISCHARGES TO WATERS OF US

MSD recorded information related to overflows reaching Waters of the United States (WUS) for the reporting period. This information is entered and maintained in IPS utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. Details of these overflows are included in Appendix A-3. During this quarter, 16 unauthorized discharges to WUS were reported, as summarized in Table 1.1.

MSD recorded information related to overflows to the ground that did not reach Waters of the United States for the reporting period. This information is entered and maintained in IPS utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows will be included in the Annual Report for the reporting period.

Table 1.1. Dry and Wet Weather SSOs by Cause - Unauthorized Discharges to Waters of US

PROBLEM	DRY WEATHER	WET WEATHER
LACK OF SYSTEM CAPACITY	0	14
STRUCTURAL FAILURE	0	1
MECHANICAL FAILURE	1	0



## 1.5.2. OVERFLOWS TO INTERIOR

MSD recorded information related to overflows to building interiors for the reporting period. This information is entered and maintained in IPS utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows, that are the result of an issue in the main line, will be included in the Annual Report for the reporting period.

## 1.6. GRAVITY LINE PREVENTIVE MAINTENANCE (GLPM)

Each quarter, data and statistics relating to the cleaning, inspection and maintenance of sewer assets performed under the Gravity Line Preventive Maintenance program are reported. Data for the current reporting period is shown in Figure 1.2 through Figure 1.4.

Targets, indicated by a blue line on the gauges in Figure 1.2 and Figure 1.4 have been developed for structured work only, which includes any preventive or predictive activities that are routinely scheduled to maintain asset condition and decrease its likelihood of failure. Corrective maintenance activities are shown in Figure 1.3 and include those activities performed as a reaction to correct asset deficiencies, whether identified through structured work or from outside the program, and do not have associated targets.







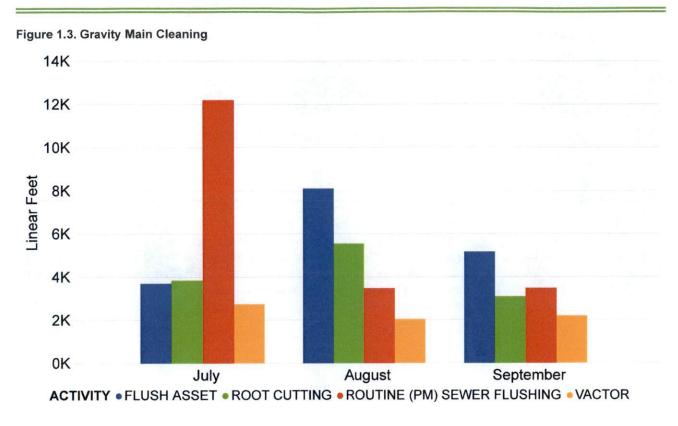
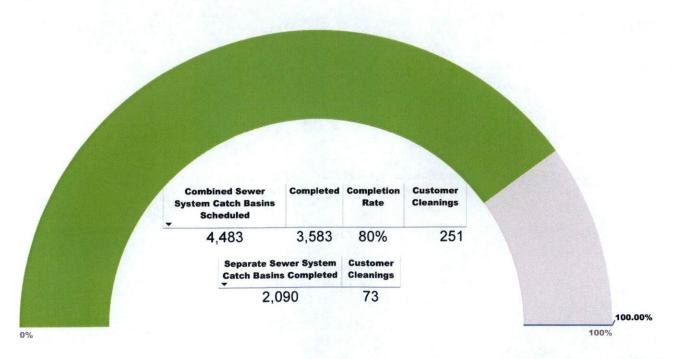


Figure 1.4. Catch Basin Cleaning





## SECTION 2: PROGRAM ACTIVITIES FOR NINE MINIMUM CONTROLS (NMC)

### 2.1. NINE MINIMUM CONTROLS PROGRAM BACKGROUND

Per Paragraph 24.a. of the Amended Consent Decree, the Nine Minimum Controls (NMC) Compliance Report was initially submitted to EPA and KDEP on February 10, 2006. MSD received approval of the report on February 22, 2007. The approved NMC compliance document can be viewed on the MSD Project Waterway Improvements Now (WIN) website, available at www.msdprojectwin.org. Highlights of the NMC program implementation over this reporting period are outlined below.

### 2.2. NMC 2: MAXIMIZATION OF STORAGE IN THE COLLECTION SYSTEM

MSD has continued operation of the Real Time Control (RTC) system. During this reporting period, approximately 605 MG were stored in the system during rain events and routed to the Morris Forman WQTC once the system was able to handle the flow. See Table 1.2 at the end of this section for a detailed report.

The following identifies on-going activities; those completed during the current period; and those anticipated to be completed during the next period:

### **RTC Integration**

- MSD and the RTC consultant continue to implement the wet weather standard operating procedures (SOPs) incrementally, starting with a period of manual operation to validate the control assumptions, followed by increasing levels of system automation as the automated controls for individual components are implemented, validated, and then incorporated into the overall RTC system.
- During this reporting period, MSD and the RTC consultant continue to monitor and evaluate the performance
  of the RTC system against operational objectives and issue updates to configurations and site tuning as
  necessary to improve performance of the recently integrated facilities and Csoft 4.
- MSD and the RTC consultant continued preparing a master programming guide for RTC facilities to document existing programming and parameters at each facility as a reference to ensure long term continuity of the RTC system.
- MSD continued review of the updated master RTC SOP manual and submittal of comments to the RTC Consultant.
- MSD and the RTC consultant contracted for continuing services.
- During the next reporting period, MSD will continue implementing RTC SOPs and validating operations. The RTC Consultant will begin developing a plan to remotely integrate and commission the Portland CSO storage basin and the Logan CSO Interceptor. MSD and the RTC consultant will continue preparing the Rowan St PS SOP in advance of integrating the facility into RTC. MSD and the RTC consultant will continue developing the master programming guide for RTC facilities to document existing programming and parameters at each facility as a reference to ensure long term continuity of the RTC system. MSD and the RTC consultant will begin development of an RTC Flood mode for facilities along the Ohio River influenced by high river levels.

### RTC Performance Assessment and Improvements

 The main objective of the RTC performance assessment is to determine whether the available flow and storage capacities within the system are utilized to their optimal potential. MSD staff continues to review and prioritize strategies for performance improvement. During the next reporting period, MSD staff and the RTC consultant will continue to implement hardware, software, and set-point changes as applicable on a site-by-site basis.



- Identified and corrected programming impacting the response of gates for filling the Southwestern Parkway CSO Basin.
- Completed installation and integration of a flow meter between the Main Diversion Structure (MDS) and the Morris Forman Water Quality Treatment Center to improve monitoring of flow from the MDS.
- The RTC consultant provided recommendations for improvements to the SWOR1 facility to enable set point increases that will allow a larger volume of in-line storage during rain events.
- During the next reporting period, MSD will continue to monitor the RTC system to ensure proper operation
  and further refine operations of the RTC system as performance issues are observed. MSD and the RTC
  consultant will continue to refine the local site tuning of RTC facilities as needed based on performance
  during varying rain events. MSD will continue to improve and automate operations of the facilities integrated into the system. MSD and the RTC consultant will continue development of the Hydroweb dashboard.

## 2.3. NMC 4: MAXIMIZATION OF FLOW AT THE MORRIS FORMAN WATER QUALITY TREATMENT CENTER

#### Plant Outage

The East and West Headworks were in service during the reporting period. Channels were taken out of service due to low flow as appropriate. The Final Effluent Pump Station (FEPS) was in service 0 days of the reporting period, limiting plant flow to 205 MGD. Flows at MFWQTC were sustained between 70 and 150 MGD, with some exceptions discussed below, before allowing flow to bypass secondary treatment during wet weather. Flows are shown in Figure 2.1 through Figure 2.3.

#### Morris Forman WQTC Projects

- MFWQTC Biosolids Management Solutions The WIFIA loan application was submitted during the previous reporting period. Application is under review and is waiting for approval.
- MFWQTC Truck Unloading Station The project was completed during the reporting period.
- MFWQTC Primary Sludge Line Replacement Project The project was completed during the reporting period.
- MFWQTC FEPS VFD Replacement The project scope changed from VFDs to soft starts. The project is scheduled to be completed in the third quarter of 2020.
- MFWQTC Cake Pump, Phase II This project will add a larger cake pump to the existing screw and pump conveyance systems for additional cake solids conveyance to the cake truck load out for offsite disposal. The project will also provide modifications to the East Cake Truck Bay to allow this second truck bay to be available for cake solids load out for offsite disposal. The project will add a third means for cake solids transfer to the load out bay and allow two trucks to be loaded from the West and East truck bay areas. Construction is estimated to be completed in the fourth quarter of 2020.
- MFWQTC Sedimentation Basin Rehabilitation Design on the project is underway. 30% design completed this quarter.
- MFWQTC Groundwater Study The study was underway during this period.
- MFWQTC Hypochlorite Building Relocation The project is currently in the design phase.
- MFWQTC OGA, PTO, and Chlorine Rail Car Facility Demolition The project design was completed during this period.



Table 2.1. Wet Weather Storage in the Morris Forman Sewer System via the RTC System

EVENT	WET	WEATH	ER EVENT	RA	INFALL						cso	SAVED V	OLUME (I	MG)							HIGH	COMMENTS
UMBER	START	END	DURATION	AVERAGE*	M	AX**	SWPS SG	SWOR2	BRADY LAKE	ASHLAND	OHIO RIVER	SOR1	SOBA	SOBA	SOBA	CLIFTON	LOGAN	SNEADS	NGPS	TOTAL	RIVER LEVELS	
	DATE	DATE		TRFD (IN)	TRFD (IN)	RAIN GAUGE	CHAMBER (14.25)	(4.1)	AND EXECUTIVE INN STORAGE (21.5)	(1.0)	INTERCEPTOR (1.8)	(14.05)	BASIN (20.0)	WO (0.95)	(3.9)	HEIGHTS (6.9)	(17.0)	BRANCH (2.5)	(8.0)	(111.1)	LEVELS	
020-049	2020-06-29 03:15 AM	2020-07- 03 04:55 AM	97:01	2	4	TR15	9	3	8	0	3	4	4	1	5	3	18	3	1	61	No	Very large wet weather event homogeneously distributed across th collection system.
20-050	2020-07-05 05:00 PM	2020-07- 06 06:05 PM	25:01	1	1	TR12	9	4	12	0	1	4	0	0	0	0	4	1	0	37	No	Moderate wet weath event homogeneous distributed across th collection system.
20-051	2020-07-06 06:05 PM	2020-07- 07 04:10 PM	22:01	0	0	TR11	0	0	0	0	0	0	0	0	0	0	2	0	0	3	No	Small wet weather event heterogeneous distributed across th collection system.
20-052	2020-07-07 04:10 PM	2020-07- 09 04:45 PM	48:01	0	1	TR14	8	2	0	0	0	0	0	0	0	0	0	0	0	11	No	Small wet weather event heterogeneous distributed across the collection system.
20-054	2020-07-11 08:30 PM	2020-07- 15 11:10 AM	86:01	1	1	TR04	3	2	3	0	2	3	0	0	0	0	1	0	0	14	No	Moderate wet weath event heterogeneous distributed across th collection system.
20-055	2020-07-17 10:40 AM	2020-07- 17 08:40 PM	9:01	0	1	TR14	1	1	0	0	0	0	0	0	0	0	0	0	0	1	No	Small wet weathe event homogeneous distributed across the collection system.
20-056	2020-07-20 03:00 PM	2020-07- 21 07:00 AM	15:01	0	1	TR15	7	4	9	1	1	2	0	0	0	0	1	0	0	25	No	Moderate wet weath event homogeneous distributed across th collection system.
20-057	2020-07-21 10:35 PM	2020-07- 25 11:45 AM	85:01	1	2	TR05	5	1	11	0	3	4	15	0	1	7	4	1	0	52	No	Large wet weathe event homogeneous distributed across th collection system.
20-061	2020-07-30 09:05 AM	2020-08- 03 04:20 PM	103:01	3	4	TR13	19	6	25	2	3	8	11	0	4	7	18	1	5	107	No	Very Large wet weather event homogeneously distributed across th collection system.
20-062	2020-08-03 04:20 PM	2020-08- 04 01:25 AM	9:01	o	0	TR11	0	o	1	0	0	0	2	0	0	0	0	0	0	3	No	Very small wet weather event heterogeneously distributed across th collection system. SOBA basin was sti dewatering from the previous event's filling

OCTOBER 30, 2020



EVENT	WET	WEATH	ER EVENT	RA	INFALL						CSO	SAVED V	OLUME (I	NG)							HIGH	COMMENTS
NUMBER	START DATE	END DATE	DURATION	AVERAGE* TRFD (IN)	TRFD (IN)	AX** RAIN GAUGE	SWPS SG CHAMBER (14.25)	SWOR2 (4.1)	BRADY LAKE AND EXECUTIVE INN STORAGE (21.5)	ASHLAND (1.0)	OHIO RIVER INTERCEPTOR (1.8)	SOR1 (14.05)	SOBA BASIN (20.0)	SOBA WO (0.95)	SOBA NWI (3.9)	CLIFTON HEIGHTS (6.9)	LOGAN (17.0)	SNEADS BRANCH (2.5)	NGPS (8.0)	TOTAL (111.1)	RIVER LEVELS	
020-064	2020-08-13 01:05 PM	2020-08- 15 09:45 AM	44:01	1	3	TR11	25	8	26	2	2	9	16	0	4	4	6	0	1	103	No	Large wet weather event heterogeneous distributed across th collection system. Problem with RTC SOBA Basin filling.
020-066	2020-08-21 03:10 PM	2020-08- 23 03:35 AM	36:01	1	1	TR12	14	2	19	0	2	7	0	0	0	2	1	0	1	49	No	Moderate wet weather event heterogeneous distributed across the collection system.
020-067	2020-08-23 04:50 PM	2020-08- 24 08:35 AM	15:01	0	0	TR05	0	0	0	o	1	0	0	0	0	0	5	0	0	6	No	Very small wet weather event heterogeneously distributed across th collection system.
020-069	2020-08-31 01:30 AM	2020-09- 02 04:10 AM	50:01	o	0	TR15	0	1	7	0	0	0	0	0	0	0	0	0	0	8	No	Very small wet weather event heterogeneously distributed across th collection system.
020-070	2020-09-02 04:10 AM	2020-09- 03 03:15 AM	23:01	1	1	TR15	5	2	8	1	1	6	0	0	2	1	3	0	0	30	No	Moderate wet weather event homogeneous distributed across the collection system.
020-071	2020-09-03 03:15 AM	2020-09- 05 07:10 PM	63:01	2	2	TR11	15	5	23	2	1	11	1	0	3	7	16	2	5	90	No	Very large wet weather event homogeneously distributed across the collection system. Problem with RTC SOBA basin filling.
020-073	2020-09-28 11:50 AM	2020-09- 28 11:10 PM	11:01	o	0	TR04	0	0	2	0	0	0	0	0	0	0	0	0	0	3	No	Very small wet weather event homogeneously distributed across the collection system.

<sup>\*</sup> Average total rainfall depth based on rain gauges TR04, TR05, TR11, TR12, TR13, TR14 and TR15.

<sup>\*\*</sup> Maximum total rainfall depth measurement and measurement location during the wet weather event.

<sup>\*\*\*</sup> The MDS is always controlled manually by operators.



- MFWQTC Dryer Demolition The demolition of all Dryer Trains was completed during the reporting period.
   Installation of new equipment is expected to begin next quarter.
- MFWQTC Chiller Replacement Design of the project is complete and is currently in the bidding phase.
- MFWQTC Headworks and Dumpster Building Structural and Blower Building Stairs The design of project is completed and is currently in the bidding phase.
- MFWQTC Sewer and Manhole Condition Assessment An additional line was added to the scope of the project. Design of the project is nearly completed.
- MFWQTC Radio Repeater Design underway with specific details resolved as a result of workshop this
  quarter

### Morris Forman WQTC Performance

Figure 2.1 through Figure 2.3 illustrate performance in maximizing flow during wet weather to Morris Forman WQTC. The top of the chart shows rainfall in inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow and secondary treatment flow. The difference between these flows is the secondary bypass flow. The bottom of the chart shows days with a CSO activation at the five CSOs in the vicinity of the Morris Forman WQTC (CSOs 015, 016, 191, 210, and 211).

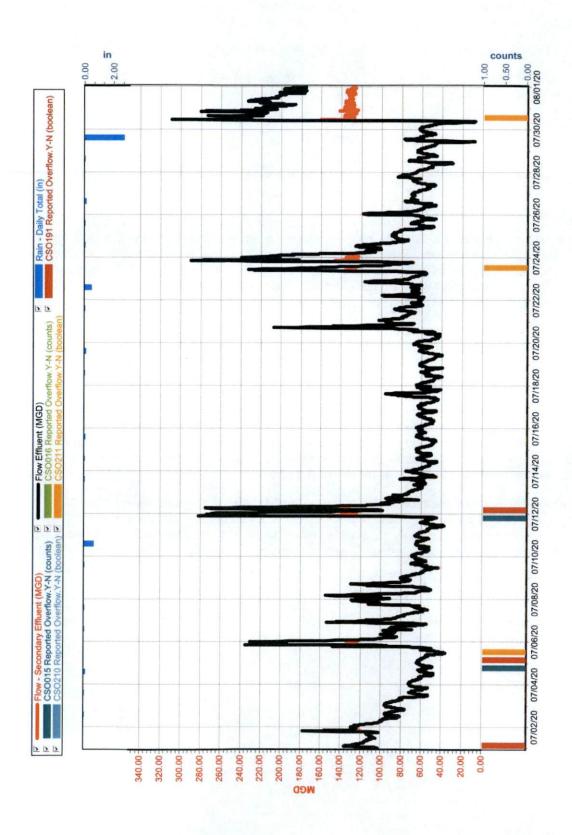
Note that the flow meter downstream from CSO211 is known to be affected by Ohio River backwater effects and the ultrasonic signal is sometimes blocked by mist and condensation when air and sewage temperatures are significantly different. Therefore, CSO activations at CSO211 are keyed to water levels upstream and downstream of the inflatable dam in the Main Diversion Structure. The other CSO activations are tied to flow measurement downstream of the respective CSO. At times, "blips" representing very small volumes of overflow are indicated by flow meters even though an overflow cannot be verified by level measurements or other indicators. These blips are not reported as overflows, but are noted in the CSO monitoring data reported in Appendix B. In addition, indications of rainfall and CSO activations are shown on the day they happened, but are not aligned with the exact time, so the effluent flow graph (which is tied to actual time) may show peaks that are offset from the indicated rain or CSO events by as much as 24 hours.

Morris Forman effluent compliance for the previous three months is summarized in Table 2.2 where a "©" indicates compliance and an "X" indicates noncompliance. MSD continues to employ additional solids processing methods, including dewatered cake, an outside vendor to assist with solids handling in addition to purchasing additional liquid oxygen, and dewatering of regional solids at Derek R. Guthrie WQTC in an effort to meet permit requirements.

### 2.4. NMC ACTIVITY SCHEDULE

NMC capital project milestones for the current reporting period as well as a look-ahead for the upcoming reporting period are provided in Figure 2.4.

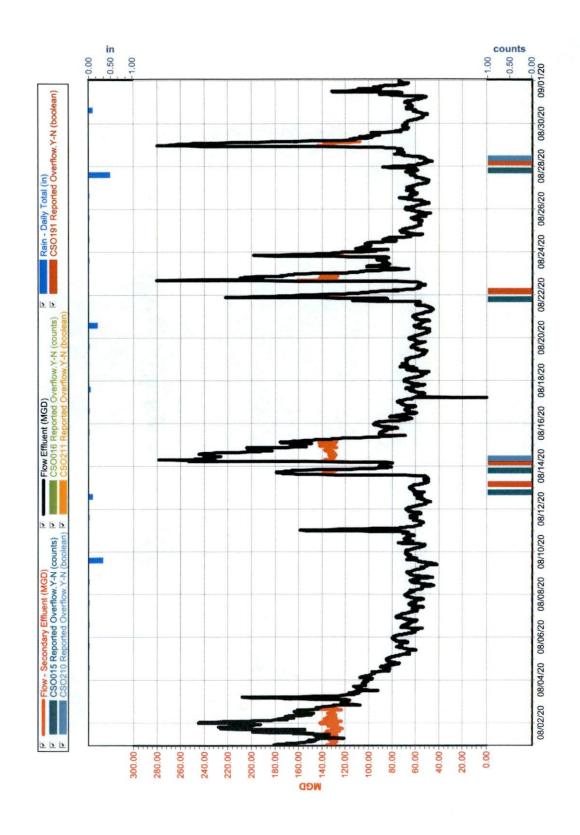






PAGE 13







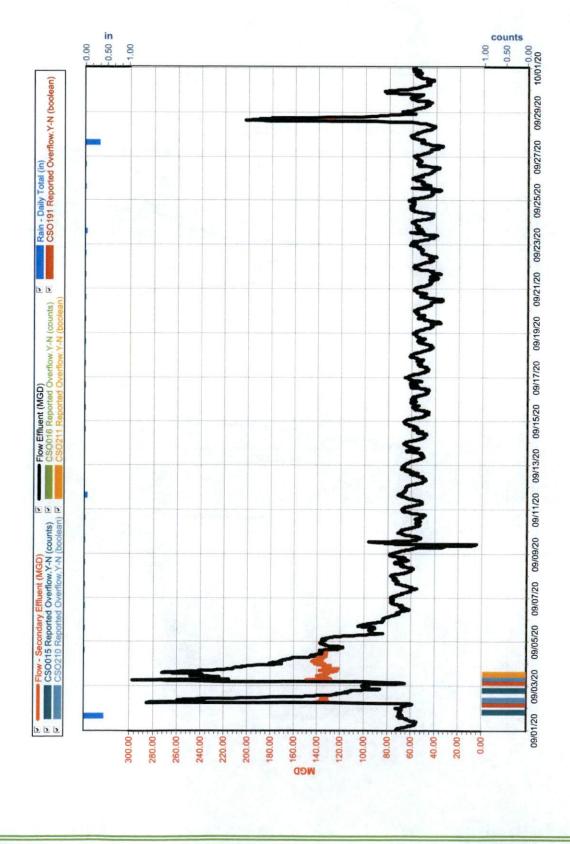
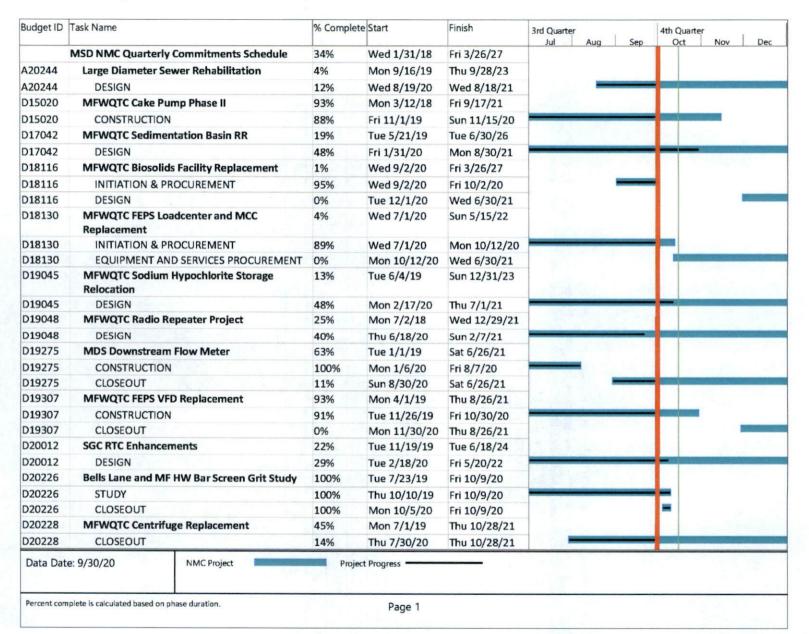




Table 2.2. Morris Forman WQTC Permit Compliance

PARAMETER	JULY	AUGUST	SEPTEMBER
Ammonia Nitrogen, 30 Day Secondary Effluent	©	©	©
Ammonia Nitrogen, 7 Day Secondary Effluent	©	©	©
BOD, 30 Day Secondary Effluent	©	X	X
BOD, 7 Day Secondary Effluent	©	©	Х
BOD, Percent Removal	©	©	©
Chlorine, Residual	©	©	©
Dissolved Oxygen	©	©	©
Fecal Coliform, 30 Day Geomean	©	©	©
Fecal Coliform, 7 Day Geomean	©	©	©
pH	©	©	©
TSS, 30 Day Secondary Effluent	©	Х	X
TSS, 7 Day Effluent	©	X	Х
TSS, Percent Removal	©	Х	X

Figure 2.4. NMC Quarterly Commitments Schedule





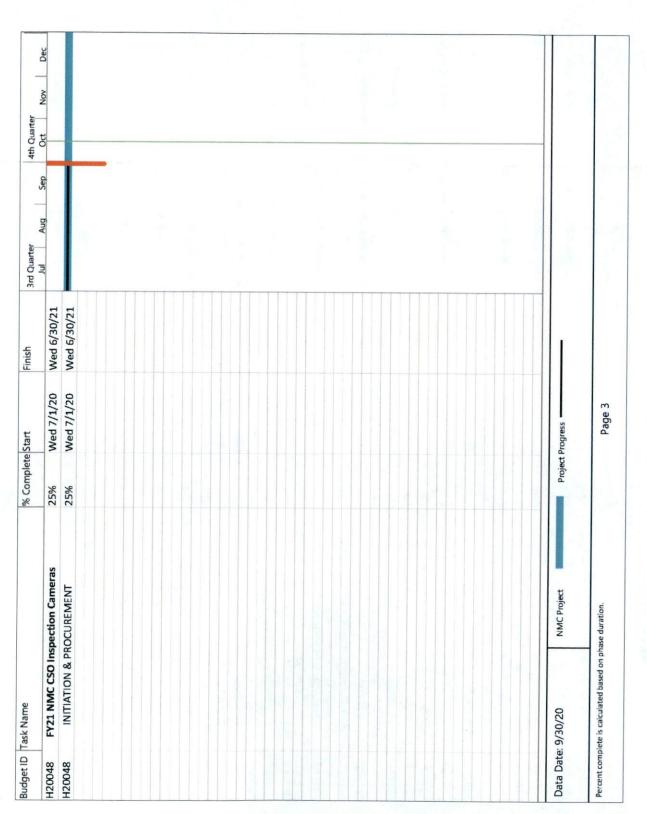
JULY 1, 2020 - SEPTEMBER 30, 2020

Figure 2.4. NMC Quarterly Commitments Schedule

D20231 CLOSEOU D20285 MFWQTC LO D20285 CONSTRU D20306 MFWQTC LO D20306 INITIATIO D20306 CLOSEOU D20337 FFWQTC An D20337 INITIATIO D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 MFWQTC FI F14182 CLOSEOU F21061 Clifton Heig	G Dryer Replacements CTION Dading Design Criteria N & PROCUREMENT T Flash Study N & PROCUREMENT	58% 29% 33% 50% 81% 86% 0% 30% 100% 29%	Mon 7/1/19 Sun 3/15/20 Mon 12/2/19 Fri 12/6/19 Tue 2/11/20 Tue 2/11/20 Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Tue 8/17/21 Tue 8/17/21 Sat 12/31/22 Sun 8/1/21 Fri 10/30/20 Fri 10/30/20 Fri 10/30/20 Wed 6/30/21 Mon 7/6/20	Jul Aug Sep	Oct Nov Dec
D20285 MFWQTC LO D20285 CONSTRU D20306 MFWQTC LO D20306 INITIATIO D20306 CLOSEOU D20337 FFWQTC An D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 CLOSEOU F21061 Clifton Heig	G Dryer Replacements CTION pading Design Criteria N & PROCUREMENT T E Flash Study N & PROCUREMENT	33% 50% 81% 86% 0% 30% 100% 29%	Mon 12/2/19 Fri 12/6/19 Tue 2/11/20 Tue 2/11/20 Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Sat 12/31/22 Sun 8/1/21 Fri 10/30/20 Fri 10/30/20 Fri 10/30/20 Wed 6/30/21 Mon 7/6/20		
020285 CONSTRU 020306 MFWQTC LO 020306 INITIATIO 020306 CLOSEOU 020337 FFWQTC And 020337 STUDY 020337 STUDY 021074 CSO 190 PC 021074 INITIATIO 021074 DESIGN 021074 DESIGN 021074 CSO 190 PC 021074 CSO 190 PC 021074 DESIGN 021074 DESIGN 021074 CSO 190 PC 021074 DESIGN 021074 DESIGN 021074 CSO 190 PC 021074 DESIGN 021074 DESIGN 021074 CSO 190 PC 021074 DESIGN	CTION  pading Design Criteria  N & PROCUREMENT  T  Flash Study  N & PROCUREMENT	50% 81% 86% 0% 30% 100% 29%	Fri 12/6/19 Tue 2/11/20 Tue 2/11/20 Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Sun 8/1/21 Fri 10/30/20 Fri 10/30/20 Fri 10/30/20 Wed 6/30/21 Mon 7/6/20		
D20306 MFWQTC Lo D20306 INITIATIO D20306 CLOSEOU D20337 FFWQTC An D20337 INITIATIO D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 MFWQTC FI F14182 CLOSEOU F21061 Clifton Heig	pading Design Criteria  N & PROCUREMENT  T  : Flash Study  N & PROCUREMENT	81% 86% 0% 30% 100% 29%	Tue 2/11/20 Tue 2/11/20 Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Fri 10/30/20 Fri 10/30/20 Fri 10/30/20 Wed 6/30/21 Mon 7/6/20		
D20306 INITIATIO D20306 CLOSEOU D20337 FFWQTC An D20337 INITIATIO D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO DESIGN F14182 MFWQTC FI F14182 CLOSEOU E21061 Clifton Heig	N & PROCUREMENT T: Flash Study N & PROCUREMENT	86% 0% 30% 100% 29% 1%	Tue 2/11/20 Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Fri 10/30/20 Fri 10/30/20 Wed 6/30/21 Mon 7/6/20		+
D20306 CLOSEOU D20337 FFWQTC Art D20337 INITIATIO D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO DESIGN F14182 MFWQTC FI F14182 CLOSEOU E21061 Clifton Heig	T : Flash Study N & PROCUREMENT	0% 30% 100% 29% 1%	Thu 10/15/20 Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Fri 10/30/20 Wed 6/30/21 Mon 7/6/20		
D20337 FFWQTC Art D20337 INITIATIO D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 MFWQTC FI F14182 CLOSEOU E21061 Clifton Heig	: Flash Study N & PROCUREMENT	30% 100% 29% 1%	Wed 7/1/20 Wed 7/1/20 Mon 7/6/20	Wed 6/30/21 Mon 7/6/20		
020337 INITIATIO 020337 STUDY 021074 CSO 190 PC 021074 INITIATIO 021074 DESIGN 014182 MFWQTC FI 014182 CLOSEOU 021061 Clifton Heig	N & PROCUREMENT	100% 29% 1%	Wed 7/1/20 Mon 7/6/20	Mon 7/6/20		
D20337 STUDY E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 MFWQTC FI F14182 CLOSEOU F21061 Clifton Heig	СМ	29% 1%	Mon 7/6/20			
E21074 CSO 190 PC E21074 INITIATIO E21074 DESIGN F14182 MFWQTC FI F14182 CLOSEOU E21061 Clifton Heig		1%			-	
E21074 INITIATIO E21074 DESIGN F14182 <b>MFWQTC FI</b> F14182 CLOSEOU F21061 <b>Clifton Heig</b>				Sun 4/25/21		
E21074 DESIGN F14182 <b>MFWQTC F</b> F14182 CLOSEOU F21061 <b>Clifton Heig</b>	N & PROCUREMENT		Wed 9/23/20	Wed 5/25/22		
F14182 MFWQTC FI F14182 CLOSEOU F21061 Clifton Heig		100%	Wed 9/23/20	Tue 9/29/20		1
F14182 CLOSEOU F21061 Clifton Heig		1%	Tue 9/29/20	Thu 1/28/21		THE RESERVE OF THE PARTY OF THE
F21061 Clifton Heig	PS Pump Repair and Motor	84%	Wed 1/31/18	Tue 3/23/21		
	T	68%	Mon 9/30/19	Tue 3/23/21		
Improveme	hts Storage Basin Sump Pump nts	2%	Wed 7/1/20	Mon 5/30/22		
21061 INITIATIO	N & PROCUREMENT	68%	Wed 7/1/20	Mon 10/12/20		A COLUMN TO THE PARTY OF THE PA
21061 CONSTRU	CTION	0%	Mon 10/12/20	Sun 5/30/21		
G18444 FY21 Plumb	ing Modification Program	25%	Wed 7/1/20	Wed 6/30/21		
G18444 INITIATIO	N & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21		
H16056 FY20 NMC		99%	Mon 7/1/19	Wed 9/30/20		
H16056 INITIATIO	N & PROCUREMENT	99%	Mon 7/1/19	Wed 9/30/20		•
H16056 CLOSEOU	Т	100%	Mon 9/14/20	Wed 9/30/20	_	1
H16074 Nightingale	Rehab	40%	Mon 7/2/18	Sun 6/5/22		
H16074 CONSTRU	CTION	54%	Fri 12/13/19	Sat 6/5/21		
H17020 FY21 NMC 5	upport	25%	Wed 7/1/20	Wed 6/30/21		The same of the sa
H17020 INITIATIO	N & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21		
H18443 FY21 NMC_	RTC	25%	Wed 7/1/20	Wed 6/30/21		
H18443 INITIATIO	N & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21		



Figure 2.4. NMC Quarterly Commitments Schedule





# Section 3: Program Activities for Sewer Overflow Response Protocol (SORP)

### 3.1. PROGRAM BACKGROUND

Per Paragraph 24.d. of the Amended Consent Decree, MSD initially submitted the Sewer Overflow Response Protocol (SORP) to EPA and KDEP on February 10, 2006, and received comments on March 13, 2006, and received an approval letter for the SORP on August 22, 2006.

MSD completely revised the SORP documentation in 2011. The draft of this revised document was submitted for comment on August 22, 2011. Comments from EPA and KDEP were received and addressed, and the document was resubmitted October 28, 2011. Final approval of the updated SORP document was received February 21, 2012. Modifications were made to the document in 2016 to reflect the elimination of the Jeffersontown WQTC, and were approved on July 21, 2017. A hard copy of the approved document has been distributed to each division throughout MSD and a viewable, downloadable electronic version has been posted to the MSD Project WIN website, available at www.msdprojectwin.org. The following activities were performed during this reporting period.

### 3.2. OVERFLOW MANAGEMENT AND FIELD DOCUMENTATION

MSD monitored approximately 143 sanitary sewer overflow (SSO) sites, which have been grouped into routes based on the range of rainfall rates necessary to cause a SSO. These routes are monitored during rain events depending on the magnitude and location of the storm. If an overflow is observed, a Discharge Work Order is created to document the event. During this quarter, 35 unauthorized discharges were identified through route reconnaissance. During this period, 5 inspection routes were run.

The West County route is monitored via telemetry. MSD determined that the inspection work orders should no longer be created to document this monitoring. However, discharge work orders will be created as required based on telemetry observations.

MSD Operations staff hauled 23,500 gallons due to capacity-related issues during this reporting period. Hauling was also initiated due to other issues as indicated in Table 5.1.

Table 3.1. Hauled Volumes in Gallons

PROBLEM	JULY	AUGUST	SEPTEMBER
LACK OF SYSTEM CAPACITY	10,000	-	13,500

MSD continued training through the online training delivery system, which allows more flexibility for employees to complete training at convenient times during the quarter and to integrate SORP training with new employee and contractor orientation.

Third quarter training utilizes the online format, and included four modules under Public Notification and Over-flow Clean-up:

- · Public Notification: Event-Based Activities
- · Public Notification: Programmatic Activities
- Overflow Cleanup
- Updates

The quarterly training was delivered to 269 staff in Operations and Engineering.



Fourth quarter training utilizes the online format, and includes modules under Reporting and Follow-up:

- · Reporting Basics
- IPS Reporting
- Paper-Based & Contingency Reporting
- Updates

These modules will be reviewed and updated as needed for delivery during the next reporting period. An update module provides continued updates related to progress under the IOAP and projects under the CMOM and NMC programs and will also be updated for delivery.



# SECTION 4: PROGRAM ACTIVITIES FOR DISCHARGE ABATEMENT PLANS (DAP)

## 4.1. INTEGRATED OVERFLOW ABATEMENT PLAN (IOAP)

As a requirement of the Amended Consent Decree, per Paragraph 25, MSD is to prepare and submit for review and approval discharge abatement plans for the elimination of unauthorized discharges from the separate sanitary and the combined sewer systems, the reduction and control of discharges from the CSO locations identified in the Morris Forman WQTC KPDES permit, and the improvement of water quality in the receiving waters.

The Final Sanitary Sewer Discharge Plan (SSDP) and the Final CSO Long Term Control Plan (LTCP) were submitted concurrently and certified on December 19, 2008, under the title of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by a Federal Order signed February 12, 2010, and was entered into public record on February 15, 2010.

MSD submitted an IOAP modification request to EPA/KDEP on September 20, 2012, with partial approval granted via certified letter on October 25, 2012. The modified project package, including program descriptions, progress, and updated supporting text, was submitted to EPA/KDEP for approval on June 14, 2013. On June 19, 2014, MSD received approval of the 2012 IOAP Modification from EPA/KDEP. The project and program modifications proposed within this submittal resulted from additional information gathered from ongoing system monitoring, hydraulic modeling and best professional judgment. MSD's adaptive management approach to overflow abatement has justified modifications which provide a higher level of overflow control. These modifications will be completed faster than originally proposed for approximately the same overall budget.

Since the June 19, 2014, approval of the 2012 IOAP Modification, minor project modification requests have been submitted and approved on an individual project basis.

## 4.2. SANITARY SEWER DISCHARGE PLAN (SSDP)

The Sanitary Sewer Discharge Plan (SSDP) addresses the overflows and unauthorized discharges from the separate sanitary sewer system. Three separate plans have been submitted under this program as described below and outlined in Paragraph 25.a. of the Amended Consent Decree.

### 4.2.1. Updated Sanitary Sewer Overflow Plan (SSOP) Implementation

MSD prepared and submitted the Updated Sanitary Sewer Overflow Plan (SSOP) on February 10, 2006. This plan included an overview of the MSD sanitary sewer overflow abatement program and specific actions taken to reduce/eliminate overflows from the sanitary sewer system. This document included a list of the proposed improvements to be accomplished by December 31, 2008. Activities required under the Updated SSOP have been completed.

### 4.2.2. INTERIM SANITARY SEWER DISCHARGE PLAN (ISSDP)

MSD submitted an Interim Sanitary Sewer Discharge Plan (ISSDP) for approval on September 30, 2007. Comments were received on January 8, 2008. MSD resubmitted the revised ISSDP on March 7, 2008, and received an approval letter for the ISSDP on July 24, 2008. The approved document can be viewed on the MSD Project WIN website, available at www.msdprojectwin.org.

All projects required by the ISSDP have been completed and certified. The Derek R. Guthrie WQTC Project's completion was delayed in accordance with the construction contract documents due to existing litigation and performance by the general contractor. However, the full functionality and capacity of the plant upgrades under this project met the demands of the service area. With this understanding, a revised certification letter dated October 19, 2015, was submitted certifying that the Derek R. Guthrie WQTC Project is performing in accordance with its stated intent and purpose, and is in compliance with the Consent Decree requirements.



### 4.2.3. FINAL SANITARY SEWER DISCHARGE PLAN (SSDP)

MSD submitted for approval a Final SSDP on December 19, 2008, as Volume 3 of the IOAP. The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by a Federal Order signed February 12, 2010, and was entered into public record on February 15, 2010. A revised SSDP was included in the 2012 IOAP Modification, submitted on June 14, 2013. On June 19, 2014, MSD received approval of the 2012 IOAP Modification from EPA/KDEP. The approved document can be viewed on the MSD Project WIN website, available at www.msdprojectwin.org.

## 4.3. CSO LONG TERM CONTROL PLAN (LTCP)

The CSO Long Term Control Plan (LTCP) addresses the overflows and unauthorized discharges from the Combined Sewer System (CSS). Two separate plans have been submitted under this program as described below and outlined in Paragraph 25.b. of the Amended Consent Decree.

### 4.3.1. INTERIM CSO LONG TERM CONTROL PLAN (LTCP)

The Interim CSO LTCP was initially submitted to EPA and KDEP on February 10, 2006, and MSD received an approval letter dated February 22, 2007. The approved Interim LTCP can be viewed on the MSD Project WIN website, available at www.msdprojectwin.org. This plan includes an overview of the MSD program, efforts taken to reduce/eliminate discharges from the CSS, and the list of proposed improvements to be accomplished by December 31, 2008. All projects associated with this plan have been completed.

### 4.3.2. FINAL CSO LONG TERM CONTROL PLAN (LTCP)

MSD submitted for approval the Final CSO LTCP on December 19, 2008, as Volume 2 of the Integrated Overflow Abatement Plan. The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, and was entered into public record on February 15, 2010. A revised LTCP was included in the 2012 IOAP Modification, submitted June 14, 2013. On June 19, 2014, MSD received approval of the 2012 IOAP Modification from EPA/KDEP. The approved document can be viewed on the MSD Project WIN website, available at www.msdprojectwin.org.

#### 4.3.3. GREEN INFRASTRUCTURE PROGRAM

The IOAP describes that "MSD's long-range commitment to this [Green Infrastructure] program will be based on how green performs in comparison to more traditional gray solutions" (Volume 2, Chapter 4, page 12). Through coordination with EPA and with strong support of MSD's Wet Weather Team stakeholder group, MSD's program evolved from solely project-level benefits to maximizing programmatic and community benefits. MSD's green infrastructure program has been successful in downsizing or eliminating gray infrastructure projects, providing a programmatic factor of safety, and providing community enhancements, as described in the FY2019 Annual Report (Section 4.3.4). Beginning with the FY2020 Annual Report, MSD will provide updates on green infrastructure practices constructed during substantial development projects and inspections of existing practices.

## 4.4. DISCHARGE ABATEMENT PLAN PROJECT STATUS

#### 4.4.1. SANITARY SEWER DISCHARGE PLAN (SSDP)

Per the current approved schedule, no SSDP projects were completed during the current reporting period or anticipated to be completed or certified during the next reporting period.

#### 4.4.2. COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN (LTCP)

Per the current approved schedule, no CSO LTCP projects were completed during the current reporting period or anticipated to be completed or certified during the next reporting period.

## 4.4.3. ACTIVITY PROGRESS CHART

A Gantt chart showing the 2012 IOAP Modification project schedules and subsequent approved minor modifications for the entire program is provided in Figure 4.1. Refer to IOAP, Volume 1 – Figure 6.3.1 for the previous chart. A crosswalk of projects and associated overflows is provided in Appendix E.





Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

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	Complet	te			Completion	Modifications*		H1 H2
entral Relief Drain CSO In-Line Storage, ireen Infrastructure & Distributed Storage	100%	Thu 1/1/15	Fri 11/30/18	Fri 11/30/18	NA	Mon 12/31/18		H1 H2 H1 H1 H1 H2 H1
Central Relief Drain CSO In-Line Storage, Green Infrastructure & Distributed Storage	100%	Thu 1/1/15	Fri 11/30/18	Fri 11/30/18	NA	Mon 12/31/18	L_OR_MF_155_M_09B_B_B_4	
CSO160 In-Line Storage & Green nfrastructure Controls	100%	Sun 1/1/12	Thu 12/10/15	Thu 12/10/15	Thu 12/31/15	Thu 12/31/15		
CSO160 In-Line Storage & Green Infrastructure Controls	100%	Sun 1/1/12	Thu 12/10/15	Thu 12/10/15	Thu 12/31/15	Thu 12/31/15	L_OR_MF_160_S_08_A_A_0	
dams Street Sewer Separation	100%	Fri 1/1/10	Wed 11/28/12	Wed 11/28/12	Mon 12/31/12	Mon 12/31/12		
Adams Street Sewer Separation	100%	Fri 1/1/10	Wed 11/28/12	Wed 11/28/12	Mon 12/31/12	Mon 12/31/12	L_OR_MF_172_S_09B_B_A_0	
SO190 Green Infrastructure Solution	100%	Sat 11/1/14	Sun 12/31/17	Fri 12/29/17	Sun 12/31/17	Sun 12/31/17		
CSO190 Green Infrastructure Solution	100%	Sat 11/1/14	Sun 12/31/17	Fri 12/29/17	Sun 12/31/17	Sun 12/31/17	L_OR_MF_190_S_09B_B_A_8	
Southern Outfall Inline Storage at 43rd St SOR1) & Morris Forman WQTC Headworks	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18		
Southern Outfall In-Line Storage at 43rd St (SOR 1)	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18		
Southern Outfall In-Line Storage at 43rd St (SOR 1)	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18	L_OR_MF_211_M_13_B_A_8	
Morris Forman WQTC Headworks	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18		
Morris Forman WQTC Headworks	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18		
Morris Forman WQTC Headworks	100%	Tue 10/1/13	Fri 11/30/18	Fri 11/30/18	Mon 12/31/18	Mon 12/31/18		
MF Main Diversion Structure	100%	Tue 10/1/13	Wed 11/28/18	Wed 11/28/18	Mon 12/31/18	Mon 12/31/18		
MF Main Diversion Structure	100%	Tue 10/1/13	Wed 11/28/18	Wed 11/28/18	Mon 12/31/18	Mon 12/31/18		
lightingale Pump Station Replacement & storage	100%	Sun 4/1/12	Thu 6/29/17	Thu 6/29/17	Sat 12/31/16	Fri 6/30/17		
Nightingale Pump Station Replacement & Storage	100%	Sun 4/1/12	Thu 6/29/17	Thu 6/29/17	Sat 12/31/16	Fri 6/30/17	L_SO_MF_018_S_03_A_A	
ogan and Breckenridge Street Storage Basin	100%	Sun 4/1/12	Wed 10/18/17	Wed 12/20/17	Sun 12/31/17	Sun 12/31/17		
Logan and Breckenridge Street Storage Basin	100%	Sun 4/1/12	Wed 10/18/17	Wed 12/20/17	Sun 12/31/17	Sun 12/31/17	L_SO_MF_092_M_09B_B_D_8	
SO093 Structural Modifications & Green of a structure	100%	Tue 11/1/11	Wed 12/23/15	Wed 12/23/15	Thu 12/31/15	Thu 12/31/15	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CSO093 Structural Modifications & Green Infrastructure	100%	Tue 11/1/11	Wed 12/23/15	Wed 12/23/15	Thu 12/31/15	Thu 12/31/15	L_SO_MF_093_S_08_A_A_0	
SO108 Dam Modifications	100%	Thu 1/1/09	Thu 12/30/10	Thu 12/30/10	Fri 12/31/10	Fri 12/31/10		
CSO108 Dam Modifications	100%	Thu 1/1/09	Thu 12/30/10	Thu 12/30/10	Fri 12/31/10	Fri 12/31/10	L_SO_MF_108_S_09A_B_A_4	
story Avenue and Spring Street Green nfrastructure	100%	Mon 4/1/13	Tue 12/20/16	Tue 12/20/16	Sat 12/31/16	Sat 12/31/16		
Story Avenue and Spring Street Green Infrastructure	100%	Mon 4/1/13	Tue 12/20/16	Tue 12/20/16	Sat 12/31/16	Sat 12/31/16	L_SO_MF_130_S_09B_B_A_8	

Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

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Completed Work



OOD PUMP STATION PROJECTS	Complete				Completion	Modifications*			
						1 2 2 2 2			
27th Street Flood Pump Station DWO Elimination		Thu 7/1/10	Fri 6/28/13	Fri 6/28/13	Sun 6/30/13	Sun 6/30/13	L OD ME 040 C 03 A A		
27th Street Flood Pump Station DWO Elimination		Thu 7/1/10	Fri 6/28/13	Fri 6/28/13	Sun 6/30/13	Sun 6/30/13	L_OR_MF_019_S_03_A_A	######################################	
34th Street Flood Pump Station DWO Elimination		Sun 11/1/09	Mon 6/11/12	Mon 6/11/12	Mon 12/31/12	Mon 12/31/12			
34th Street Flood Pump Station DWO Elimination		Sun 11/1/09	Mon 6/11/12	Mon 6/11/12	Mon 12/31/12		L_OR_MF_019_S_03_A_B		
4th Street Flood Pump Station DWO Elimination	100%	Sun 11/1/09	Fri 6/15/12	Fri 6/15/12	Mon 12/31/12	Mon 12/31/12			
4th Street Flood Pump Station DWO Elimination	100%	Sun 11/1/09	Fri 6/15/12	Fri 6/15/12	Mon 12/31/12		L_OR_MF_022_M_03_A_A	<del></del>	
Shawnee Flood Pump Station DWO Elimination	100%	Thu 7/1/10	Tue 6/18/13	Tue 6/18/13	Sun 6/30/13	Sun 6/30/13			
Shawnee Flood Pump Station DWO Elimination	100%	Thu 7/1/10	Tue 6/18/13	Tue 6/18/13	Sun 6/30/13	Sun 6/30/13	L_OR_MF_189_M_03_A_A	***************************************	
17th Street Flood Pump Station DWO Elimination	100%	Thu 1/1/09	Thu 12/18/14	Thu 12/18/14	Wed 12/31/14	Wed 12/31/14			68
17th Street Flood Pump Station DWO Elimination	100%	Thu 1/1/09	Thu 12/18/14	Thu 12/18/14	Wed 12/31/14	Wed 12/31/14	L_OR_MF_190_S_03_A_A		n
NITARY SEWER DISCHARGE PLAN	1		The Williams						
ARGRASS CREEK MIDDLE FORK AREA									
Goose Creek PS Improvements and Wet Weather Storage	58%	Fri 4/15/16	NA	NA	Tue 12/31/24	Tue 12/31/24			
Goose Creek PS Improvements & Wet Weather Storage 1 - Devondale PS and Bancroft WQTC Elimination	100%	Fri 4/15/16	Thu 6/29/17	Tue 7/25/17	Tue 12/31/24	Tue 12/31/24			
Goose Creek PS Improvements & Wet Weather Storage 1 - Devondale PS and Bancroft WQTC Elimination	100%	Fri 4/15/16	Thu 6/29/17	Tue 7/25/17	Tue 12/31/24	Tue 12/31/24	S_MI_MF_NB04_M_03_B		•
Goose Creek PS Improvements & Wet Weather Storage 2 - PS and FM Upgrades	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24			
Goose Creek PS Improvements & Wet Weather Storage 2 - PS and FM Upgrades	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24	S_MI_MF_NB04_M_03_B		
Anchor Estates Pump Station Elimination	100%	Tue 11/1/11	Fri 4/15/16	Fri 4/15/16	Sat 12/31/16	Sat 12/31/16	3	2	
Anchor Estates PS Elimination 2 - Anchor Estates #1 and #2 PS Elimination	100%	Mon 4/1/13	Fri 4/15/16	Fri 4/15/16	Sat 12/31/16	Sat 12/31/16			
Anchor Estates PS Elimination 2 - Anchor Estates #1 and #2 PS Elimination	100%	Mon 4/1/13	Fri 4/15/16	Fri 4/15/16	Sat 12/31/16	Sat 12/31/16	S_MI_MF_NB06_M_01_A_A - 1		

Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

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	Complet	e			Completion	Modifications*	A THE RESERVE OF THE PARTY OF T	H1 H2 H1 H2 H1 H2 H4 H2 H4 H2 H4	اء بامريا من امريا ويا اويا اويا	احتراميا ويراميا
Anchor Estates PS Elimination 1 - Vannah PS Elimination	-	Tue 11/1/11	Sat 10/15/11	Sat 10/15/11	Tue 12/31/13	Tue 12/31/13		H1 H2 H1 H2 H1 H2 H1 H2 H1 H2 H	1  H2  H1  H2  H1  H2  H1  H2  H1	H2  H1  H2  H1  H2
Anchor Estates PS Elimination 1 - Vannah PS Elimination	100%	Tue 11/1/11	Sat 10/15/11	Sat 10/15/11	Tue 12/31/13	Tue 12/31/13	S_MI_MF_NB06_M_01_A_A - 2			S S Com
Hurstbourne I/I Investigation & Rehabilitation	100%	Wed 7/1/09	Tue 12/27/11	Tue 12/27/11	Sat 12/31/11	Sat 12/31/11				
Hurstbourne I/I Investigation & Rehabilitation	100%	Wed 7/1/09	Tue 12/27/11	Tue 12/27/11	Sat 12/31/11	Sat 12/31/11	S_MI_MF_NB07_S_07_C			
Middle Fork Relief Interceptor, Wet Weather Storage, and UMFLS Diversion	48%	Wed 4/1/09	Sun 12/31/23	NA	Sun 12/31/23	Tue 12/31/13				
Middle Fork Relief Interceptor, Wet Weather Storage, and UMFLS Diversion 1 - Buechel Basin	100%	Wed 4/1/09	Fri 12/27/13	Fri 12/27/13	Tue 12/31/13	Tue 12/31/13				ng dan a g
Middle Fork Relief Interceptor, Wet Weather Storage, and UMFLS Diversion 1 - Buechel Basin	100%	Wed 4/1/09	Fri 12/27/13	Fri 12/27/13	Tue 12/31/13	Tue 12/31/13	S_MISF_MF_NB01_M_01_C_A1			Pag
Middle Fork Relief Interceptor, Wet Weather Storage, and UMFLS Diversion 2 - PS Diversion and Storage	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23				
Middle Fork Relief Interceptor, Wet Weather Storage, and UMFLS Diversion 2 - PS Diversion and Storage	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23	S_MISF_MF_NB01_M_01_C_A1			
DAR CREEK AREA										
Little Cedar Creek Interceptor	0%	NA	NA	NA.	Tue 12/21/24	Tue 12/21/22				
Improvements	U76	NA	NA	NA	Tue 12/31/24	Tue 12/31/24				
Little Cedar Creek Interceptor Improvements	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24	S_CC_CC_67997_M_01_C		¥	
Idlewood Inline Storage	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23				1 21
Idlewood Inline Storage	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23	S_CC_CC_70158_M_09A_C			
Bardstown Rd. PS Improvements	0%	NA	NA	NA	Fri 12/31/21	Fri 12/31/21				100
Bardstown Rd. PS Improvements	0%	NA	NA	NA	Fri 12/31/21	Fri 12/31/21	S_CC_CC_MSD1025_S_03_B			
Running Fox PS Elimination	100%	Thu 1/1/09	Wed 3/10/10	Wed 3/10/10	Fri 12/31/10	Fri 12/31/10				
Running Fox PS Elimination	100%	Thu 1/1/09	Wed 3/10/10	Wed 3/10/10	Fri 12/31/10	Fri 12/31/10	S_CC_CC_MSD1080_S_01_C			
Fairmount Road Pump Station	100%	Fri 12/18/09	Wed 3/30/16	Thu 3/31/16	Sun 12/31/23	Sun 12/31/23		<del></del>		
Fairmount Rd PS Improvements	100%	Fri 12/18/09	Tue 4/24/12	Tue 4/24/12	Sun 12/31/23	Sun 12/31/23				
Fairmount Rd PS Improvements	100%	Fri 12/18/09	Tue 4/24/12	Tue 4/24/12	Sun 12/31/23	Sun 12/31/23	S_FF_CC_81316_M_03_C_A			
Fairmount PS Offline Storage Basin	100%	Sat 3/3/12	Thu 3/31/16	Thu 3/31/16	Sun 12/31/23	Thu 3/31/16				
Fairmount PS Offline Storage Basin	100%	Sat 3/3/12	Thu 3/31/16	Thu 3/31/16	Sun 12/31/23	Thu 3/31/16	S_FF_CC_81316_M_03_C_A			
MBINED SEWER SYSTEM AREA										***************************************
Hazelwood PS I/I Investigation &	100%	Thu 1/1/09	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11				

Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

Completed Work



e 4.1. IOAP Implementation Schedule	Complete	1	1	lo	Completion	Modifications*		H1 H2
Hazelwood PS I/I Investigation & Rehabilitation		Thu 1/1/09	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	S_MC_MF_55665_S_07_C	
Sonne Pump Station I/I Investigation & Rehabilitation	100%	Wed 7/1/09	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11		
Sonne Pump Station I/I Investigation & Rehabilitation	100%	Wed 7/1/09	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	Thu 6/30/11	S_OR_MF_42007_S_07_C	
Camp Taylor	66%	Thu 1/1/09	Fri 12/15/23	NA	Sun 12/31/17	Sun 12/31/17		
Camp Taylor Phase 1 - SSES	100%	Thu 1/1/09	Fri 7/8/11	Fri 7/8/11	Sat 12/31/11	Tue 12/31/13		
Camp Taylor Phase 1 - SSES	100%	Thu 1/1/09	Fri 7/8/11	Fri 7/8/11	Sat 12/31/11	Tue 12/31/13	S_SF_MF_30917_M_09_A	
Camp Taylor Phase 2 - Sewer Replacement and Rehabilitation	100%	Wed 4/1/09	Fri 12/20/13	Fri 12/20/13	Tue 12/31/13	Sun 12/31/17		
Camp Taylor Phase 2 - Sewer Replacement and Rehabilitation	100%	Wed 4/1/09	Fri 12/20/13	Fri 12/20/13	Tue 12/31/13	Sun 12/31/17	S_SF_MF_30917_M_09_A	
Camp Taylor Phase 3 - Sewer Replacement and Rehabilitation	100%	Mon 7/1/13	Sun 12/31/17	Fri 12/15/17	Sun 12/31/17	Sun 12/31/17	1,200	
Camp Taylor Phase 3 - Sewer Replacement and Rehabilitation	100%	Mon 7/1/13	Fri 12/15/17	Fri 12/15/17	Sun 12/31/17	Sun 12/31/17	S_SF_MF_30917_M_09_A	**************************************
Camp Taylor Phase 4 - Storage Basin and Sewer Upsize	0%	Wed 7/1/20	Fri 12/15/23	NA	Tue 12/31/24	Tue 12/31/24		
Camp Taylor Phsae 4 - Storage Basin and Sewer Upsize	0%	Wed 7/1/20	Fri 12/15/23	NA	Tue 12/31/24	Tue 12/31/24	S_SF_MF_30917_M_09_A	
OYDS FORK AREA								
Woodland Hill PS Diversion	100%	Thu 4/1/10	Thu 3/4/10	Thu 3/4/10	Thu 6/30/11	Thu 4/1/10		
Woodland Hill PS Diversion	100%	Thu 4/1/10	Thu 3/4/10	Thu 3/4/10	Thu 6/30/11	Thu 4/1/10	S_FF_FF_NB01_S_01_C_A	
Ashburton PS Improvements & Diversion	100%	Thu 1/1/09	Wed 12/30/09	Wed 12/30/09	Fri 12/31/21	Fri 1/22/10		
Ashburton PS Improvements & Diversion	100%	Thu 1/1/09	Wed 12/30/09	Wed 12/30/09	Fri 12/31/21	Fri 1/22/10	S_FF_FF_NB03_M_01_C_A	
E CREEK AREA								
Meadow Stream Pump Station & Force Main Upgrade	100%	Tue 7/1/14	Tue 12/18/12	Tue 12/18/12	Sat 12/31/16	Sat 12/31/16		
Meadow Stream Pump Station & Force Main Upgrade	100%	Tue 7/1/14	Tue 12/18/12	Tue 12/18/12	Sat 12/31/16	Sat 12/31/16	S_HC_HC_MSD1082_S_09A_C	***************************************
Kavanaugh Rd. PS Improvements	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24		
Kavanaugh Rd. PS Improvements	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24	S_HC_HC_MSD1085_S_03_A	
Floydsburg Rd. I/I Investigation & Rehabilitation	100%	Sun 11/1/09	Fri 12/17/10	Fri 12/17/10	Fri 12/31/10	Fri 12/31/10		
Floydsburg Rd. I/I Investigation & Rehabilitation	100%	Sun 11/1/09	Fri 12/17/10	Fri 12/17/10	Fri 12/31/10	Fri 12/31/10	S_HC_HC_MSD1086_M_07_C_A	

Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

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Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

Approved 2009 IOAP HITTHEFITTHEFITTH IOAP Modifications Remaining Work

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Completed Work



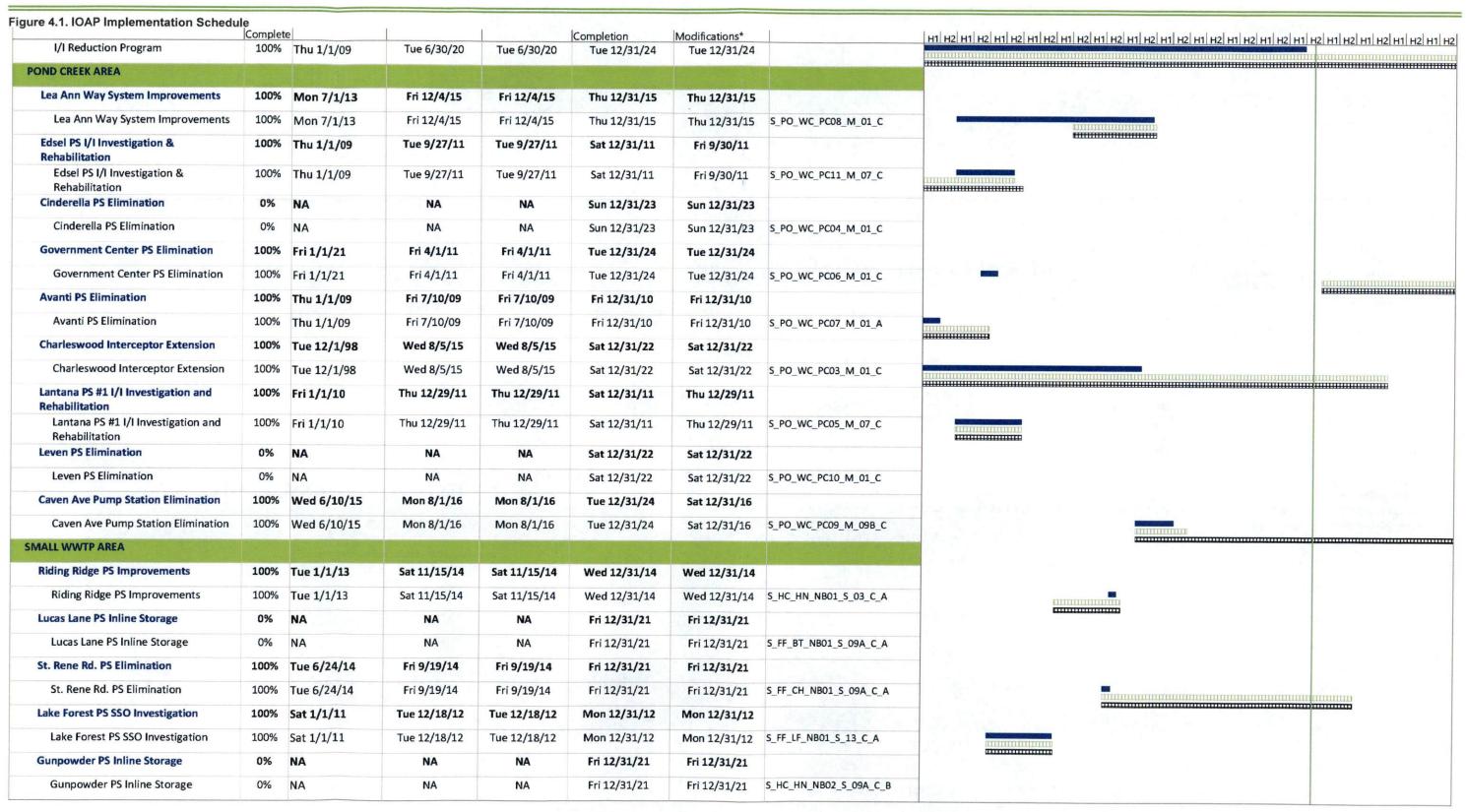
re 4.1. IOAP Implementation Schedule	omplete	1			Completion	Modifications*		H1   H2   H1
Monticello PS Elimination		NA	NA	NA	Sat 12/31/22	Sat 12/31/22		
Monticello PS Elimination	0%	NA	NA	NA	Sat 12/31/22	Sat 12/31/22	S_JT_JT_NB04_M_01_A	
MILL CREEK AREA							· Andrews	
Shively Interceptor	100%	Wed 7/1/09	Fri 4/13/12	Fri 4/13/12	Wed 12/31/14	Wed 12/31/14		
Shively Interceptor	100%	Wed 7/1/09	Fri 4/13/12	Fri 4/13/12	Wed 12/31/14	Wed 12/31/14	S_MC_WC_NB01_M_01_A	
East Rockford PS Relocation	100%	Thu 1/1/09	Fri 3/30/12	Fri 3/30/12	Fri 12/31/21	Fri 12/31/21		
East Rockford PS Relocation	100%	Thu 1/1/09	Fri 3/30/12	Fri 3/30/12	Fri 12/31/21	Fri 12/31/21	S_MC_WC_NB02_S_03_C	
HIO RIVER FORCE MAIN AREA								
Mellwood System Improvements & PS Elimination	49%	Wed 4/1/09	Wed 12/19/12	NA	Tue 12/31/24	Tue 12/31/24		
Mellwood System Improvements & PS Elimination - Mellwood PS and FM Improvements	100%	Wed 4/1/09	Wed 12/19/12	Wed 12/19/12	Mon 12/31/12	Mon 12/31/12		
Mellwood System Improvements & PS Elimination - Mellwood PS and FM Improvements	100%	Wed 4/1/09	Wed 12/19/12	Wed 12/19/12	Mon 12/31/12	Mon 12/31/12	S_OR_MF_NB01_M_01_B	
Mellwood System Improvements & PS Elimination - Winton and Mockingbird Valley Elimination	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24		
Mellwood System Improvements & PS Elimination - Winton and Mockingbird Valley Elimination	0%	NA	NA	NA	Tue 12/31/24	Tue 12/31/24	S_OR_MF_NB01_M_01_B	
Derington Ct. PS I/I Investigation & Rehabilitation	100%	Thu 4/1/10	Fri 3/30/12	Fri 3/30/12	Sat 3/31/12	Sat 3/31/12		
Derington Ct. PS I/I Investigation & Rehabilitation	100%	Thu 4/1/10	Fri 3/30/12	Fri 3/30/12	Sat 3/31/12	Sat 3/31/12	S_OR_MF_NB03_S_07_C	
Prospect WQTC Eliminations, Harrods Creek PS and ORFM System	100%	Fri 7/1/11	Mon 12/19/16	Mon 12/19/16	Sat 12/31/16	Sat 12/31/16		
Prospect #1 - WQTC Eliminations	100%	Fri 7/1/11	Tue 12/15/15	Tue 12/15/15	Thu 12/31/15	Thu 12/31/15		
Prospect #1 - WQTC Eliminations	100%	Fri 7/1/11	Tue 12/15/15	Tue 12/15/15	Thu 12/31/15	Thu 12/31/15	S_OR_MF_NB04_M_03_B_B	######################################
Prospect #2 - Harrods Creek PS and FM	100%	Fri 7/1/11	Tue 12/15/15	Tue 12/15/15	Thu 12/31/15	Thu 12/31/15		
Prospect #2 - Harrods Creek PS and FM	100%	Fri 7/1/11	Tue 12/15/15	Tue 12/15/15	Thu 12/31/15	Thu 12/31/15	S_OR_MF_NB04_M_03_B_B	
Prospect #3 - ORFM System Improvements	100%	Tue 1/1/13	Mon 12/19/16	Mon 12/19/16	Sat 12/31/16	Sat 12/31/16		
Prospect #3 - ORFM System Improvements	100%	Tue 1/1/13	Mon 12/19/16	Mon 12/19/16	Sat 12/31/16	Sat 12/31/16	S_OR_MF_NB04_M_03_B_B	
OTHER PROJECTS								
CPE_CCP Modifications To WQTC	100%	Thu 1/1/09	Mon 12/19/11	Mon 12/19/11	Sat 12/31/11	Sat 12/31/11		
CPE_CCP Modifications To WQTC	100%	Thu 1/1/09	Mon 12/19/11	Mon 12/19/11	Sat 12/31/11	Sat 12/31/11		
I/I Reduction Program	100%	Thu 1/1/09	Tue 6/30/20	Tue 6/30/20	Tue 12/31/24	Tue 12/31/24		

Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date.

Approved 2009 IOAP \*\*\* IOAP Modifications \*\*\* Remaining Work

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Includes 2014 approval of 2012 IOAP modification as well as all minor mod letter approvals to date

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gure 4.1. IOAP Implementation Schedu	Complete				Completion	Modifications*		H1 H2	H1 H2 H1 H2 H1 H2 H1 H2 H1
Fairway View PS Improvements	100%	Tue 1/1/13	Tue 12/30/14	Tue 12/30/14	Wed 12/31/14	Wed 12/31/14			
Fairway View PS Improvements	100%	Tue 1/1/13	Tue 12/30/14	Tue 12/30/14	Wed 12/31/14	Wed 12/31/14	S_HC_HS_NB01_S_03_C_A		
SOUTHEASTERN DIVERSION AREA									
Parkview Estates I/I Investigation & Rehabilitation	100%	Fri 1/1/10	Tue 6/28/11	Tue 6/28/11	Sat 12/31/11	Sat 12/31/11			
Parkview Estates I/I Investigation & Rehabilitation	100%	Fri 1/1/10	Tue 6/28/11	Tue 6/28/11	Sat 12/31/11	Sat 12/31/11	S_SD_MF_NB03_S_07_C		
Klondike Interceptor	100%	Fri 10/1/10	Thu 12/5/13	Thu 12/5/13	Thu 12/31/15	Thu 12/31/15			
Klondike Interceptor	100%	Fri 10/1/10	Thu 12/5/13	Thu 12/5/13	Thu 12/31/15	Thu 12/31/15	S_SD_MF_NB04_S_01_B_A		
Sutherland Interceptor	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23			
Sutherland Interceptor	0%	NA	NA	NA	Sun 12/31/23	Sun 12/31/23	S_SD_MF_NB05_M_01_A		
Beargrass Interceptor Rehab Ph. 2	100%	Wed 4/1/09	Tue 12/14/10	Tue 12/14/10	Fri 12/31/10	Fri 12/31/10			
Beargrass Interceptor Rehab Ph. 2	100%	Wed 4/1/09	Tue 12/14/10	Tue 12/14/10	Fri 12/31/10	Fri 12/31/10	S_SD_MF_NB06_S_13_C		

MSD has a need to reprioritize its capital program. As such, MSD is currently discussing the start and end dates for the remaining IOAP projects that have not yet started with USEPA and KDOW. The dates that are shown in Figure 4-1 as "NA" and will be provided in a future report pending the outcome of these discussions. The dates that were previously provided for these projects were based upon a prior prioritization."

Data Date: 9/30/20





# SECTION 5: PROGRAM ACTIVITIES FOR PUBLIC OUTREACH, EDUCATION, NOTIFICATION AND PARTICIPATION

## 5.1. Public Notification Program

MSD has developed a program aimed at notifying the community of the objectives of Project WIN, and ways to reduce the risks of coming into contact with sewage overflows.

# 5.2. Public Education Programs

A public education program about Louisville MSD's primary business functions of wastewater treatment, storm-water management and flood protection has been developed and is in use across multiple platforms. MSD uses earned media through local and regional outlets to educate the public about our vital services, initiatives, consent decree projects and more.

Paid advertising is utilized in our local papers—Business First and the Courier Journal—to inform and educate the public about our consent decree projects and MS4 initiatives. We moved from a single full-page print ad in the Courier Journal to three quarter-page ads, increasing the reach to an estimated 306,000 for the Project WIN messaging. We also added a digital campaign to augment the print ads, reaching more than 831,000. The digital on-line campaign continued to increase awareness of the Waterway Protection Tunnel project, sewer overflows and What Not To Flush.

Direct mail communications through post card, letters and bill inserts are also utilized for external communications.

Social media and our website — LouisvilleMSD.org — are important methods to reach and educate the public. We are on FaceBook, Twitter and Instagram.

MSD included Consent Decree compliance, wastewater facility upgrades, and aging infrastructure as key topics in its Critical Repair & Reinvestment Plan. Public education about this initiative continue to include posts on MSD's website and social media accounts.

During the reporting period, Metro TV aired the programs listed in Table 5.1.

### 5.3. Public Outreach Programs

MSD has developed a public education program aimed at expanding the public's knowledge of MSD's primary business functions of wastewater, stormwater and flood protection, with an emphasis on Project WIN Program elements.

### **5.3.1. IOAP PROJECT AND PROGRAM MEETINGS**

MSD facilitates meetings for the Wet Weather Team and the public to review regulatory commitments, update progress on projects and initiatives, and to gather public input on efforts.

MSD has developed a partnership with Louisville Metro for providing project information and soliciting feedback from stakeholders using a Structured Public Involvement approach. Structured Public Involvement is meant to facilitate relevant input on the design process as MSD prepares to design and construct CSO basins. The current IOAP outreach activities and public meetings are using this process to elicit qualitative and quantitative information and enhance engagement with customers. Additional information regarding the Structured Public Involvement Process and meetings held during this reporting period may be found at the Project WIN Public Input Website, available at http://www.msdprojectwin.org/Public-Input.aspx.

MSD held no meetings during the current reporting period. During the upcoming reporting period, MSD has no meetings planned.



Table 5.1. Metro TV Broadcasts

DATE	PROGRAM TITLE	ORIGINAL MEETING DATE
7/1/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
7/5/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
7/17/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
7/22/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
7/25/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
8/7/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
8/9/2020	Portland CSO Basin: Conceptual Design Meeting	6/14/2016
8/11/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
8/17/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
8/24/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
8/30/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
9/2/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
9/8/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
9/11/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
9/13/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017
9/14/2020	Ohio River Tunnel: Construction Meeting	1/10/2018
9/23/2020	Southwestern Parkway CSO Basin: Construction Meeting	4/18/2017



# Section 6: Capacity Management Operations and Maintenance (CMOM) Report

Per Paragraph 24.c. of the Amended Consent Decree, the Capacity Management Operations and Maintenance (CMOM) Self Assessment Report was submitted to EPA and KDEP on February 10, 2006. MSD received a letter of approval on August 22, 2006. The approved CMOM document can be viewed on the MSD Project WIN website, available at www.msdprojectwin.org.

The primary objectives of CMOM are as follows:

- Capacity Ensuring that adequate wet and dry weather capacity is maintained in existing and new infrastructure.
- Management Implementing programs in support of operations and maintenance activities required to
  ensure KPDES permit compliance and promote public health by remedying design, construction and operational deficiencies; training staff; and performing activities in a safe manner.
- Operations Implementing written standard operating procedures to operate system components as designed to meet permit requirements.
- Maintenance Implementing systematic, comprehensive asset maintenance and rehabilitation programs to prevent overflows, maximize system reliability, and ensure system sustainability.

Although the program implementation deadlines from the CMOM Self Assessment Report were previously met, MSD continues to enhance the activities. Highlights of the CMOM program implementation over this reporting period are outlined below.

### **6.1. MANAGEMENT PROGRAMS**

M-E-9 Infrastructure Rehabilitation

Refer to the CMOM activity schedule provided in Section 6.3.

M-E-10 System Capacity Assurance Program

Included in the goals of the CMOM Self-Assessment Report, the Sewer Capacity Assurance Plan (SCAP) is the basis for applying capacity decision criteria to support watershed community values. It provides a programmatic approach for confirming available capacity within MSD's sanitary sewer system, creating capacity credits through system improvement and rehabilitation, identifying hydraulic constrictions, and proposing capacity improvements that support interim and long-term performance objectives. SCAP revisions, including credit and balance projections and discussion of approach for multi-family residential unit populations, were discussed with EPA and KDEP and submitted electronically for review on July 21, 2014. The final SCAP revision was submitted for approval on December 9, 2014, and approval was received February 5, 2015. A copy of the approved SCAP can be found on the Project WIN website, available at www.msdprojectwin.org.

A current copy of the SCAP Credit Balance is included as Appendix D

### 6.2. OPERATIONS PROGRAMS

O-A-1 Pump Station Operations Programs (Routine Operating Programs)

O-A-2 Pump Station Operations Programs (Emergency Operating Programs)

Refer to the CMOM activity schedule provided in Section 6.3.



# 6.3. COMPREHENSIVE PERFORMANCE EVALUATIONS AND COMPOSITE CORRECTION PLANS (CPE/CCP)

Per requirements of MSD's 2009 Amended Consent Decree, MSD implemented a Comprehensive Performance Evaluation (CPE) and Composite Correction Plan (CCP) program for the District's WQTCs. Although the IOAP CPE assessments that defined specific WQTC improvements were completed by December 31, 2011, MSD will continue to implement CPE/CCP activities as part of the District's CMOM Program. This section lists activities per WQTC as they occur during the reporting period.

Refer to the CMOM activity schedule provided in Section 6.3. for CPE/CCP-related capital projects.

### 6.3.1. HITE CREEK WATER QUALITY TREATMENT CENTER

The HCWQTC Expansion project will expand the capacity of HCWQTC from 6 MGD to 9 MGD and provide regional dewatering of solids. The project will be in construction during the next several reporting periods. Startup of the Dewatering system expected next quarter.

### 6.3.2. FLOYDS FORK WATER QUALITY TREATMENT CENTER

No major project occurred during the reporting period.

### 6.3.3. DEREK R. GUTHRIE WATER QUALITY TREATMENT CENTER

Construction of the Dewatering Project continued during this reporting period. Solids from all the regional WQTCs (Cedar Creek, Floyds Fork, Hite Creek as well as DRG) have been dewatered at a temporary system referred to as Phase 1. Construction of the Phase 2 system is now complete and is used for dewatering. Construction of the Phase 3 building is underway.

Clarifier Grout Repair and Gate Replacement project continued in construction during this reporting period.

The Admin Building and RAS Building HVAC project is in construction during the reporting period.

The RAS Electrical Modifications project is in construction during the reporting period.

Design of the Paving project was completed and awaiting start of construction.

### 6.3.4. CEDAR CREEK WATER QUALITY TREATMENT CENTER

Design of the Sodium Aluminate Building project was advertised for bidding this quarter.

Design of the CCWQTC Effluent Parshall Flume Upgrades project was advertised for bidding this quarter. The CCWQTC MCC Upgrades project is under construction.

### 6.3.5. PROSPECT AREA WATER QUALITY TREATMENT CENTER UPDATES

An elimination plan for the five WQTCs serving Prospect (Timberlake, Hunting Creek North, Hunting Creek South, Ken Carla, and Shadow Wood) was submitted to EPA/KDEP on March 31, 2009. Approval of this plan was received on September 24, 2009, and work is now complete. A certification letter dated December 15, 2015, was submitted finalizing the completion of the project.

### 6.3.6. JEFFERSONTOWN WATER QUALITY TREATMENT CENTER

A certification letter dated December 23, 2015, was submitted finalizing the completion of the Jeffersontown WQTC Elimination Project.

### 6.3.7. OTHER WATER QUALITY TREATMENT CENTERS

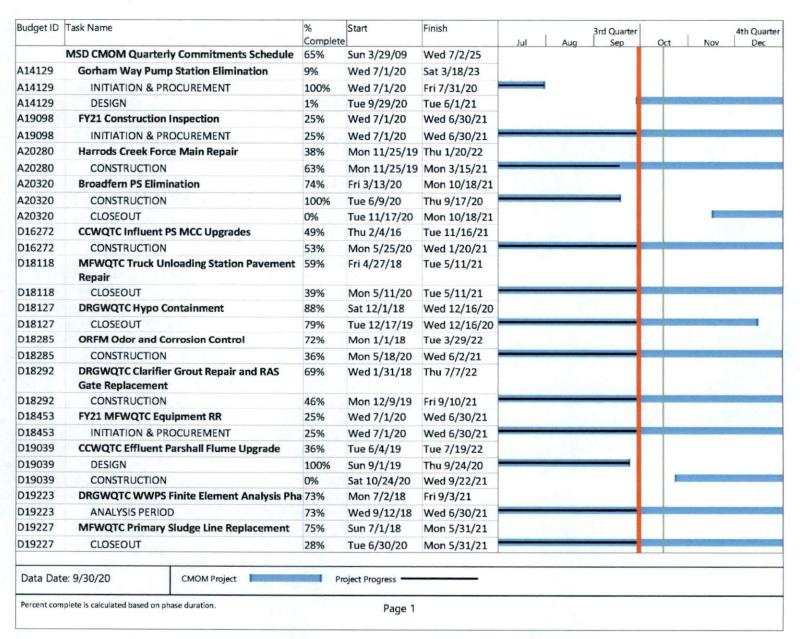
All non-regional WQTCs owned or operated by MSD in Jefferson County have been eliminated as of May 27, 2016.



# 6.4. CMOM ACTIVITY SCHEDULE

CMOM capital project milestones for the current reporting period as well as a look-ahead for the upcoming reporting period are provided in Figure 6.1.

Figure 6.1. CMOM Quarterly Commitments Schedule

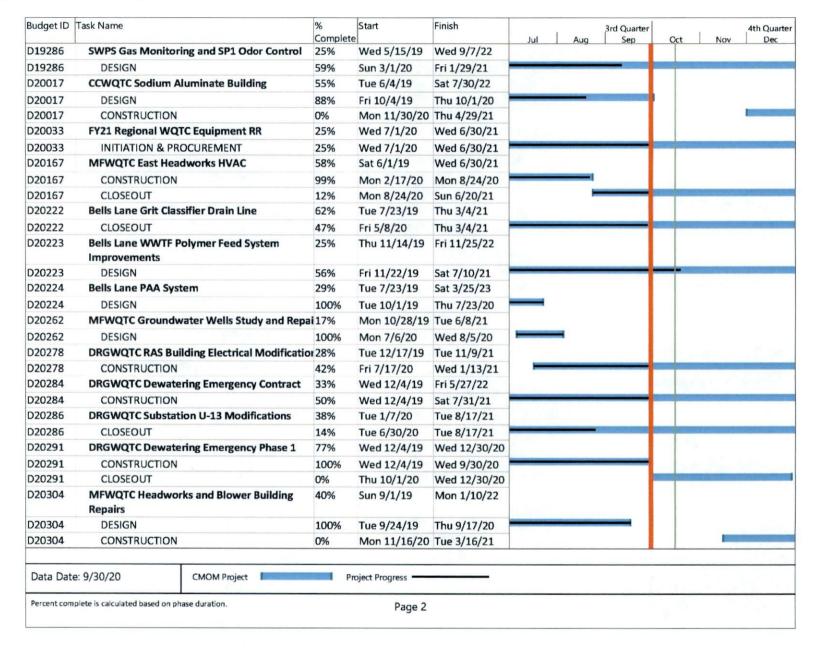




PROJECT WIN QUARTERLY REPORT #60

JULY 1, 2020 - SEPTEMBER 30, 2020

Figure 6.1. CMOM Quarterly Commitments Schedule





PROJECT WIN QUARTERLY REPORT #60

1, 2020 -

**SEPTEMBER 30, 2020** 

Figure 6.1. CMOM Quarterly Commitments Schedule

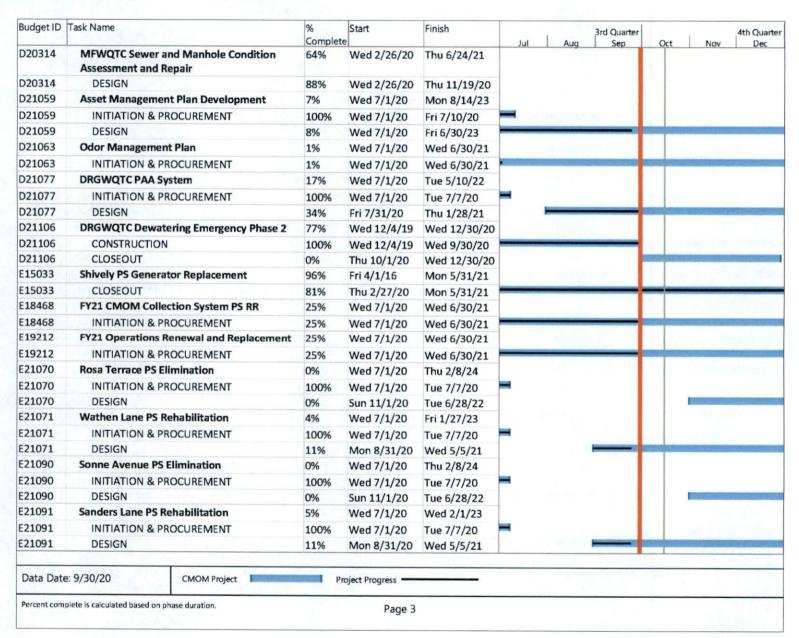




Figure 6.1. CMOM Quarterly Commitments Schedule

Budget ID	Task Name	% Complete	Start	Finish	Jul Aug	3rd Quarter	Oct N	4th Quarter
F20321	Bluegrass Fields Pump Station Renovation	15%	Mon 3/16/20	Fri 5/20/22	Jul J Aug	3ep	000	ov Dec
F20321	DESIGN	65%	Mon 5/18/20	Thu 11/26/20				
G21001	FY21 Renewal and Replacement	25%	Wed 7/1/20	Wed 6/30/21				
G21001	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21				
H14126	HCWQTC Expansion	60%	Mon 11/2/15	Mon 10/10/22				
H14126	CONSTRUCTION	57%	Fri 3/8/19	Wed 9/15/21				
H18096	FY21 CMOM Program Management Assistance	25%	Wed 7/1/20	Wed 6/30/21				
H18096	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21				
H18097	FY21 CMOM, SCAP, AAM and FOG	10%	Wed 7/1/20	Wed 6/30/21				
H18097	INITIATION & PROCUREMENT	10%	Wed 7/1/20	Wed 6/30/21				
H18173	FY21 Information Governance Architecture	25%	Wed 7/1/20	Wed 6/30/21				
H18173	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21				
H20056	FY21 CMOM I and C Implementation	25%	Wed 7/1/20	Wed 6/30/21				
H20056	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21			THE RESERVE	
H20061	FY20 CMOM Gravity Line Cleaning and Inspect	100%	Mon 7/1/19	Wed 9/30/20				
H20061	INITIATION & PROCUREMENT	100%	Mon 7/1/19	Wed 9/30/20				
H20061	CLOSEOUT	100%	Fri 9/25/20	Wed 9/30/20		-		
H20062	FY21 CMOM Gravity Line Cleaning and Inspect	25%	Wed 7/1/20	Wed 6/30/21				
H20062	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21		_	STATE OF THE PERSON NAMED IN	
H20138	FY21 PMIS	25%	Wed 7/1/20	Wed 6/30/21				
H20138	INITIATION & PROCUREMENT	25%	Wed 7/1/20	Wed 6/30/21				
H20153	SWPS Flood Repair	70%	Tue 6/4/19	Wed 1/19/22				
H20153	CONSTRUCTION	79%	Sun 3/1/20	Thu 11/26/20				
H20153	CLOSEOUT	0%	Thu 11/26/20	Wed 1/19/22				PER MANAGE
H20215	Camp Taylor 2A SSR - Union St Sewers	69%	Tue 8/20/19	Mon 2/15/21				
H20215	CLOSEOUT	59%	Tue 3/17/20	Mon 2/15/21				
H20297	FY20 Asset Management Assistance	96%	Wed 1/29/20	Sun 11/1/20				
H20297	INITIATION & PROCUREMENT	98%	Wed 1/29/20	Fri 10/2/20				
H20297	CLOSEOUT	0%	Tue 10/27/20	Sun 11/1/20				
H21111	FY21 FOG Program Support	15%	Wed 7/1/20	Wed 6/30/21				
H21111	INITIATION & PROCUREMENT	15%	Wed 7/1/20	Wed 6/30/21	200			
Data Dat	e: 9/30/20 CMOM Project	Pro	oject Progress		MV - 175			Talk Talk
Percent com	plete is calculated based on phase duration.		Page 4					



Figure 6.1. CMOM Quarterly Commitments Schedule

Budget ID	Task Name	% Complete	Start	Finish	1st Quarter Jan Feb Mar	2nd Quarte Apr May Jun
116045	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		
116074	Nightingale Rehab	22%	Mon 7/2/18	Sun 6/5/22		
116074	CONSTRUCTION	20%	Fri 12/13/19	Sat 6/5/21		
118172	FY20 Information Governance	72%	Mon 7/1/19	Tue 6/30/20		
118172	INITIATION & PROCUREMENT	75%	Mon 7/1/19	Tue 6/30/20		
118172	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		The state of the s
118503	I-64 and Grinstead Infrastructure Rehabilitation	0%	Mon 7/1/19	Thu 4/25/24		and the same of th
118503	INITIATION & PROCUREMENT	50%	Mon 7/1/19	Thu 7/1/21		
119088	FY20 CMOM Grinder RR	73%	Mon 7/1/19	Tue 6/30/20		
119088	INITIATION & PROCUREMENT	73%	Mon 7/1/19	Tue 6/30/20		
119088	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		lum lum
119095	FY20 PS RR	70%	Mon 7/1/19	Tue 6/30/20		
119095	INITIATION & PROCUREMENT	73%	Mon 7/1/19	Tue 6/30/20		
119095	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		
120045	FY20 Regulatory Compliance Support	72%	Mon 7/1/19	Tue 6/30/20		
120045	INITIATION & PROCUREMENT	75%	Mon 7/1/19	Tue 6/30/20		
120045	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		
120055	FY20 CMOM I_C Implementation	72%	Mon 7/1/19	Tue 6/30/20		
120055	INITIATION & PROCUREMENT	75%	Mon 7/1/19	Tue 6/30/20		
120055	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		
120061	FY20 CMOM Gravity Line Cleaning and Inspection	70%	Mon 7/1/19	Tue 6/30/20		
120061	INITIATION & PROCUREMENT	73%	Mon 7/1/19	Tue 6/30/20		
120061	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20		
120137	FY20 PMIS	50%	Mon 7/1/19	Tue 6/30/20		
H20137	INITIATION & PROCUREMENT	75%	Mon 7/1/19	Tue 6/30/20		
120137	CLOSEOUT	0%	Mon 6/15/20	Tue 6/30/20	Control of the	
120153	SWPS Flood Repair	49%	Tue 6/4/19	Fri 8/20/21		1 1 1 1 7 7 7 7 7
120153	DESIGN	100%	Tue 8/6/19	Thu 1/9/20	=	
120153	CONSTRUCTION	25%	Sun 3/1/20	Mon 6/29/20		
120153	CLOSEOUT	0%	Mon 6/29/20	Fri 8/20/21		
Data Date	: 3/31/20 CMOM Project	Project Prog	ress			





# APPENDIX A

**DISCHARGE WORK ORDERS** 



APPENDIX A-1 BYPASSES





ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#		VOLUME OF OVERFLOW (GAL)		SOURCE ASSET Discharges to	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	W0 #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
		and the second s										

No Bypasses
Occurred during
the Reporting
Period

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APPENDIX A-2 DRY WEATHER CSOS





ASSOCIATED WQTC NAME	ASSOCIATED WOTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET Type	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	W0 #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	2295 LEXINGTON RD	7/13/2020 21:30	7/14/2020 12:00	100000	Sewer Manhole	CSO127	GROUND	MIDDLE FORK BEARGRASS CREEK	OBSTRUCTION IN THE MAINLINE DUE TO CONSTRUCTION ACTIVITIES BY CONTRACTORS.	OBSTRUCTION-NOT GREASE /ROOTS	DRY WEATHER DISCHARGE	3279408	UNABLE TO CLEAN IMPACTED AREA DUE TO THE SIZE OF THE CREEK AND DIFFICULTY ACCESSING DISCHARGE AREAS.	UKNOWN AT THIS TIME.

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APPENDIX A-3

UNAUTHORIZED DISCHARGES





ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET Type	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	W0 #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
FLOYDS FORK	KY0102784	611 WOODLAKE DR	7/16/2020 15:55	7/16/2020 16:00	250	Sewer Main	80581B-AG	STREAM	FLOYDS FORK	STRUCTURAL FAILURE, FORCE MAIN BREAK.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3279457	AREA DISINFECTED WITH LIME.	FORCE MAIN AND PUMP @ TAKEN OUT OF SERVICE.
FLOYDS FORK	KY0102784	611 WOODLAKE DR	7/27/2020 12:00	7/27/2020 13:10	2000	Sewer Main	80581A-AG	GROUND	CHENOWETH RUN	STRUCTURAL FAILURE OF THE FORCE MAIN.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3284347	NONE AT THIS TIME.	CONTACTED CONTRACTOR TO CONDUCT REPAIRS ISOLATED #1 FORCEMAIN TO STOP FLOW.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	7/30/2020 15:30	7/31/2020 16:00	2100000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3289023	NO CLEANUP REQUIRED, MANHOLE IS DISCHARGING DIRECTLY INTO CREEK.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	7/30/2020 21:23	7/31/2020 5:19	300000	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3289099	NO CLEANUP REQUIRED, PIPES DISCHARGE UNDERWATER, DIRECTLY INTO RIVER.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	1011 ALTA CIR	7/31/2020 9:00	7/31/2020 14:15	15000	Sewer Manhole	45796	рітсн	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3289119	WO#3289306	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	8/1/2020 20:15	8/2/2020 12:30	700000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3289313	NOT REQUIRED,MANHOLE DISCHARGES DIRECTLY INTO THE CREEK.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	9/3/2020 7:00	9/3/2020 18:45	3300000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298917	NO CLEANUP REQUIRED DISCHARGE PIPE DISCHARGES DIRECTLY INTO CREEK.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3317 DELL RD	9/3/2020 7:50	9/3/2020 14:07	5640	Sewer Manhole	28413	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298932	WO#3299296	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3400 DELL RD	9/3/2020 7:51	9/3/2020 14:06	9375	Sewer Manhole	28414	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298931	WO#3299295	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3406 DELLRD	9/3/2020 7:53	9/3/2020 14:03	18500	Sewer Manhole	28415	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298929	WO#3299294	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	9/3/2020 7:55	9/4/2020 6:15	53600	Sewer Manhole	28453	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298934	WO#3299346	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	9/3/2020 7:56	9/3/2020 14:08	744	Sewer Manhole	28452	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298935	WO#3299298	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	10191 BUNSEN WAY	9/3/2020 8:30	9/9/2020 13:48	51705	Sewer Manhole	111120	GROUND	CHENOWETH RUN	RAIN EVENT CAUSED CULVERT AND ROAD FAILURE AND DAMAGED SEWER LINE.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3299002	SIGNS AT LOCATION.	ISSUE REPAIRED.
MORRIS FORMAN	KY0022411	2408 GRAY FOX RD	9/3/2020 8:30	9/4/2020 6:40	99000	Sewer Manhole	27012	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298936	WO#3299347	LOCATION INCLUDED IN THE IOAP.

OCTOBER 30, 2020



ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET Type	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	W0 #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	9/3/2020 8:37	9/3/2020 16:35	400000	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298915	NO CLEANUP REQUIRED DISCHARGE PIPE IS SUBMERGED AND DIRECTLY INTO CREEK.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	1011 ALTA CIR	9/3/2020 8:40	9/4/2020 6:54	198000	Sewer Manhole	45796	DITCH	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298938	WO#3299348	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3620 CHARLANE PKY	9/3/2020 8:43	9/3/2020 14:11	16400	Sewer Manhole	28340	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298939	WO#3299299	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	9707 WILLOWWOOD WAY	9/3/2020 8:45	9/3/2020 14:12	39120	Sewer Manhole	28336	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298940	WO#3299300	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	7913 SHELBYVILLE RD	9/3/2020 10:05	9/3/2020 13:17	6144	Sewer Manhole	84155	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298941	WO#3299302	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	9/3/2020 10:13	9/3/2020 13:28	24375	Sewer Manhole	02932	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298942	WO#3299304	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	202 OXMOOR LN	9/3/2020 10:23	9/4/2020 6:40	425950	Sewer Manhole	47583	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298944	RESET MANHOLE LID. NO CLEANUP PERFORMED. ADDITIONAL RAIN WASHED AWAY DEBRIS BEFORE CLEAN UP COULD BE INITIATED. LIMITED ACCESS TO DUE TO CONSTRUCTION.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	201 BULLITT LN	9/3/2020 10:26	9/3/2020 13:40	48500	Sewer Manhole	47582	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298945	WO#3299305	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4313 PRUITT CT	9/3/2020 12:10	9/4/2020 7:10	399000	Sewer Manhole	08427	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298988	WO#3299344	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4341 PRUITT CT	9/3/2020 12:13	9/3/2020 14:44	302	Sewer Manhole	08430	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298983	WO#WO#3299291	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4315 PRUITT CT	9/3/2020 12:15	9/3/2020 14:43	148	Sewer Manhole	08426	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298986	WO#3299289	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4337 PRUITT CT	9/3/2020 12:20	9/4/2020 7:11	1131	Sewer Manhole	08429	GROUND	BUECHEL BRANCH	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298984	WO#3299342	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4332 PRUITT CT	9/3/2020 12:30	9/4/2020 7:12	5655	Sewer Service Line	085100290046A	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298991	WO#3299345	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	4345 PRUITT CT	9/3/2020 12:30	9/3/2020 14:45	675	Sewer Service Line	85055	GROUND	BUECHEL BRANCH	LACK OF SYSTEM CAPACITY – HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3298989	WO#3299290	LOCATION INCLUDED IN THE IOAP.
HITE CREEK	KY0022420	169 CHARTER OAKS DR	9/11/2020 11:08	9/11/2020 11:18	100	Sewer Main	30931	GROUND	HITE CREEK	OBSTRUCTION IN THE LINE	OBSTRUCTION-NOT GREASE / ROOTS	DRY WEATHER DISCHARGE	3300250	UNDETERMINED BUT PLACED ONE DISCLEAN BY MSD MAY BE PRIVATE AFTER TV INSPECTION	CREW MADE REPAIRS



ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET Type	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	wo #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	4522 ALGONQUIN PKY	9/30/2020 12:00	9/30/2020 16:00	200	Sewer Treatment Plant	MSD0278	STREAM	OHIO RIVER	SEAL FAILURE ON ISOLATION GATE.	MECHANICAL FAILURE	DRY WEATHER DISCHARGE	3306770	N/A	PUMPED OUT REMAINING WATER.





APPENDIX B

**CSO FLOW MONITORING DATA** 



START DATE

END DATE

DURATION

RAIN

8/23/2020 17:45

8/23/2020 18:00

15

3,165,113

cso			(MIN)	TOTAL (INCH)	PER RAIN	RAIN	(YR)	(HR)			VOLUME (GAL)	
CSO015	7/1/2020 17:45	7/2/2020 0:15	390	0	17,056	2	0	1	Atlas	(blank)	6,652	1
	7/5/2020 16:00	7/5/2020 23:30	450	0	11,537,414	0	0	1	Atlas	(blank)	807,619	1
	7/12/2020 11:30	7/12/2020 23:00	690	1	30,601	1	1	1	Atlas	(blank)	31,213	1
	8/13/2020 15:00	8/13/2020 19:30	270	1	2,435	0	0	6	Atlas	(blank)	2,605	1
	8/14/2020 7:15	8/14/2020 20:45	810	1	1,643,353	1	0	6	Atlas	(blank)	1,758,388	1
	8/22/2020 15:15	8/22/2020 23:30	495	0	19,613,616	0	0	1	Atlas	(blank)	7,453,174	1
	8/28/2020 23:45	8/29/2020 0:30	45	0	830	0	0	3	Atlas	(blank)	415	1
	9/2/2020 5:45	9/2/2020 8:15	150	0	3,535	0	0	3	Atlas	(blank)	1,202	1
	9/3/2020 3:15	9/3/2020 19:30	975	1	22,550,113	2	9 (1)1 - T	6	Atlas	(blank)	29,089,646	1
CSO015 Total	-										39,150,914	9
CSO019	7/5/2020 17:45	7/5/2020 19:30	105	0	1,048,063	1	0	3	Atlas	(blank)	83,845	1
	7/8/2020 1:30	7/8/2020 4:15	165	0	683,594	0	0	1	Atlas	(blank)	123,047	1
	7/11/2020 20:00	7/12/2020 5:45	585	0	339,313	0	0	12	Atlas	(blank)	230,733	1
	7/17/2020 15:15	7/17/2020 15:15	0	0	8,643,200	0	0	1	Atlas	(blank)	86,432	1
	7/22/2020 1:30	7/22/2020 1:30	0	0	21,440	0	0	1	Atlas	(blank)	4,288	1
	7/23/2020 0:45	7/23/2020 11:15	630	0	120,539	0	0	12	Atlas	(blank)	37,367	1
	7/23/2020 20:00	7/23/2020 22:15	135	0	6,230,000	0	0	1	Atlas	(blank)	62,300	1
	7/27/2020 16:00	7/27/2020 17:15	75	0	192,576	0	0	1	Atlas	(blank)	40,441	1
-	7/30/2020 8:30	7/31/2020 13:45	1755	3	6,042,851	3	2	12	Cloudburst	(blank)	15,348,842	1
	8/1/2020 12:15	8/2/2020 2:00	825	0	1,183,604	3	0	12	Atlas	(blank)	331,409	1
	8/3/2020 1:30	8/3/2020 9:15	465	0	790,196	3	0	3	Atlas	(blank)	213,353	1
	8/14/2020 4:00	8/14/2020 20:15	975	2	5,079,170	2	2	3	Atlas	(blank)	10,463,091	1
	8/22/2020 14:30	8/22/2020 16:15	105	0	746,220	0	0	3	Atlas	(blank)	37,311	1
	8/28/2020 11:00	8/29/2020 4:30	1050	0	445,965	0	0	24	Atlas	(blank)	227,442	1
1	8/31/2020 5:30	8/31/2020 6:30	60	0	134,953	0	0	12	Atlas	(blank)	20,243	1
	9/2/2020 3:30	9/2/2020 11:15	465	0	566,077	1	0	3	Atlas	(blank)	271,717	1
	9/2/2020 23:45	9/3/2020 19:15	1170	1	8,452,318	2	1	6	Atlas	(blank)	9,889,212	1
	9/24/2020 8:45	9/24/2020 16:30	465	0	8,796,200	0	0	1	Atlas	(blank)	175,924	1
	9/28/2020 12:00	9/28/2020 17:00	300	0	343,129	0	0	6	Atlas	(blank)	82,351	1
CSO019 Total									FO 81		37,729,348	19
CSO022	7/7/2020 23:15	7/7/2020 23:15	0	0	531,976	0	0	1	Atlas	(blank)	196,831	1
	7/30/2020 10:15	7/30/2020 11:00	45	2	85,981	2	1	12	Cloudburst	(blank)	211,514	1
	7/30/2020 20:15	7/30/2020 20:30	15	2	149,134	2	1 1	12	Cloudburst	(blank)	366,869	1

0

0

Atlas

(blank)

759,627

DISCHARGE ANTECEDENT FREQUENCY PERIOD STANDARD

COMMENT

DISCHARGE COUNT



{	111
Safe, clean waterways	

cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO022 Total											1,534,841	4
CSO023	7/30/2020 20:15	7/30/2020 20:15	0	2	354	2	1	12	Cloudburst	(blank)	871	1
CSO023 Total											871	1
CSO028	7/30/2020 9:15	7/30/2020 9:15	0	3	8,728	1	1	12	Cloudburst	(blank)	22,256	1
	7/30/2020 19:15	7/30/2020 19:30	15	3	6,199	2	1.	12	Cloudburst	(blank)	15,808	1
CSO028 Total				7 (							38,064	2
CSO029	7/30/2020 9:00	7/30/2020 9:15	15	3	4,316	1	1	12	Cloudburst	(blank)	11,005	1
575	7/30/2020 19:00	7/30/2020 19:15	15	3	38,614	2	1	12	Cloudburst	(blank)	98,465	1
	9/3/2020 4:45	9/3/2020 4:45	0	1	2,528	1	1	6	Atlas	(blank)	2,705	1
CSO029 Total						- 11					112,175	3
CSO031	7/23/2020 19:30	7/23/2020 19:30	0	0	213	1	0	24	Atlas	(blank)	143	1
	7/30/2020 12:00	7/30/2020 19:30	450	3	1,591	3	1	12	Cloudburst	(blank)	4,056	1
CSO031 Fotal			12 ha						3374		4,199	2
CSO034	7/23/2020 19:00	7/23/2020 19:00	0	0	3,097	1	0	24	Atlas	(blank)	2,075	1
	7/30/2020 9:15	7/30/2020 19:30	615	3	65,681	3	1	12	Cloudburst	(blank)	167,487	1
	8/23/2020 17:15	8/23/2020 17:15	0	0	5,400	0	0	1	Atlas	(blank)	270	1
	9/3/2020 4:45	9/3/2020 4:45	0	1	3,346	1	1	6	Atlas	(blank)	3,580	1
CSO034 Total											173,412	4
CSO036	7/23/2020 19:15	7/23/2020 19:15	0	0	43,913	0	0	24	Atlas	(blank)	23,713	1
	7/30/2020 10:15	7/30/2020 19:45	570	2	63,127	3	1	12	Cloudburst	(blank)	154,031	1
	8/23/2020 16:45	8/23/2020 17:30	45	0	688,393	0	0	1	Atlas	(blank)	103,259	1
CSO036 Total											281,003	3
CSO038	7/30/2020 9:30	7/30/2020 9:30	0	3	8,321	1	1	12	Cloudburst	(blank)	21,218	1
	7/30/2020 19:30	7/30/2020 19:30	0	3	283	2	1	12	Cloudburst	(blank)	722	1
SO038 Total							-		3.2.4		21,940	2
CSO050	7/5/2020 18:15	7/5/2020 18:30	15	0	834,229	2	0	1	Atlas	(blank)	116,792	1
	7/7/2020 22:30	7/7/2020 22:45	15	0	637,519	0	0	1	Atlas	(blank)	102,003	1
	7/11/2020 19:45	7/12/2020 4:00	495	0	164,552	0	0	12	Atlas	(blank)	110,250	1
	7/23/2020 7:30	7/23/2020 19:30	720	0	471,810	0	0	24	Atlas	(blank)	273,650	1
	7/30/2020 8:30	7/30/2020 21:30	780	2	1,294,233	3	1	12	Cloudburst	(blank)	3,106,160	1

cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	8/1/2020 12:30	8/1/2020 22:15	585	0	164,211	3	0	12	Atlas	(blank)	29,558	1
	8/3/2020 2:30	8/3/2020 2:30	0	0	16,231	3	0	3	Atlas	(blank)	2,597	1
	8/14/2020 5:30	8/14/2020 8:45	195	1	743,273	1	_ 1	6	Atlas	(blank)	825,033	1
	8/22/2020 14:15	8/22/2020 14:30	15	0	480,063	0	0	1	Atlas	(blank)	91,212	1
	8/23/2020 16:45	8/23/2020 18:00	75	0	250,888	0	0	3	Atlas	(blank)	20,071	1
	8/28/2020 20:15	8/28/2020 23:00	165	0	290,493	0	0	3	Atlas	(blank)	122,007	1
	8/31/2020 5:15	8/31/2020 5:30	15	0	88,682	0	0	1	Atlas	(blank)	19,510	1
	9/2/2020 3:30	9/2/2020 5:00	90	0	278,176	11	0	3	Atlas	(blank)	172,469	1
	9/3/2020 2:45	9/3/2020 8:15	330	1	1,053,679	3	11	3	Atlas	(blank)	1,475,151	1
	9/28/2020 12:15	9/28/2020 14:30	135	0	153,205	0	0	6	Atlas	(blank)	32,173	1
CSO050 Total						144 [ ]					6,498,636	15
CSO051	7/5/2020 18:15	7/5/2020 18:15	0	0	13,464	2	0	1	Atlas	(blank)	1,885	-1
	7/7/2020 22:30	7/7/2020 22:30	0	0	23,081	0	0	1	Atlas	(blank)	3,693	1
	7/11/2020 19:45	7/11/2020 19:45	0	0	2,854	0	0	12	Atlas	(blank)	1,912	1
	7/23/2020 19:00	7/23/2020 19:00	0	0	7,834	0	0	24	Atlas	(blank)	4,544	1
	7/30/2020 8:30	7/30/2020 21:00	750	2	70,494	3	1	12	Cloudburst	(blank)	169,186	1
	8/1/2020 12:15	8/1/2020 16:00	225	0	15,361	3	0	12	Atlas	(blank)	2,765	1
	8/14/2020 5:30	8/14/2020 7:00	90	1	22,012	1	1	6	Atlas	(blank)	24,433	1
	8/23/2020 16:45	8/23/2020 16:45	0	0	36,400	0	0	3	Atlas	(blank)	2,912	1
	8/28/2020 22:30	8/28/2020 22:30	0	0	10,600	0	0	3	Atlas	(blank)	4,452	1
	8/31/2020 5:15	8/31/2020 5:15	0	0	1,973	0	0	1	Atlas	(blank)	434	1
	9/2/2020 3:30	9/2/2020 4:30	60	0	10,694	1	0	3	Atlas	(blank)	6,630	1
	9/3/2020 2:45	9/3/2020 7:30	285	1	48,057	3	1	3	Atlas	(blank)	67,280	1
CSO051 Total											290,126	12
CSO052	7/30/2020 9:15	7/30/2020 10:00	45	3	1,798	2	2	12	Cloudburst	(blank)	4,800	1
	7/30/2020 19:15	7/30/2020 19:15	0	3	863	3	2	12	Cloudburst	(blank)	2,305	1
	8/22/2020 14:00	8/22/2020 14:00	0	0	83,071	0	0	1	Atlas	(blank)	5,815	1
CSO052 Total											12,920	3
CSO054	7/30/2020 9:30	7/30/2020 21:00	690	3	196,654	3	2	12	Cloudburst	(blank)	525,066	1
-1 -33	8/23/2020 17:15	8/23/2020 17:30	15	0	17,093	0	0	3	Atlas	(blank)	2,564	1
	9/3/2020 5:15	9/3/2020 7:30	135	1	222,603	2	1 -	6	Atlas	(blank)	255,993	1 -
CSO054 Total			W 3		3.7	- 14.74					783,623	3
CSO055	7/5/2020 18:15	7/5/2020 18:30	15	0	71,820	1	0	1	Atlas	(blank)	3,591	1



CSO

START DATE

END DATE

DURATION

(MIN)

RAIN

TOTAL

DISCHARGE

PER RAIN



PROJECT WIN QUARTERLY REPORT #60

**JULY 1, 2020 - SEPTEMBER 30, 2020** 

### (INCH) (GAL) 7/7/2020 22:15 7/7/2020 22:30 15 0 118,123 0 0 Atlas 30,712 1 (blank) 7/11/2020 20:00 7/11/2020 20:00 0 0 142 0 0 12 Atlas (blank) 81 1 7/23/2020 17:30 7/23/2020 19:15 105 0 60,656 0 0 3 Atlas (blank) 51,558 1 7/30/2020 9:15 735 3 3 2 7/30/2020 21:30 508,700 12 Cloudburst (blank) 1,358,228 1 8/3/2020 1:15 8/3/2020 1:15 0 0 3 0 3 8.492 Atlas (blank) 1,019 1 8/14/2020 5:45 105 0 0 0 6 8/14/2020 7:30 182,860 Atlas (blank) 133,488 1 0 8/22/2020 14:15 0 0 0 8/22/2020 14:15 328.043 1 Atlas (blank) 22,963 1 75 8/23/2020 17:00 8/23/2020 18:15 0 1,692,527 0 0 3 Atlas (blank) 253,879 1 8/28/2020 22:30 8/28/2020 22:45 15 0 0 0 3 1 7,523 Atlas (blank) 3,009 9/2/2020 3:45 9/2/2020 4:45 60 0 41,762 1 0 3 15,452 1 Atlas (blank) 9/3/2020 3:00 9/3/2020 8:00 300 1 473,201 2 1 6 Atlas (blank) 544,181 1 CSO055 12 2,418,161 Total CSO056 7/7/2020 22:30 7/7/2020 22:30 0 0 157,588 0 0 1 Atlas (blank) 40,973 1 7/30/2020 9:30 675 3 7/30/2020 20:45 115,829 3 2 12 Cloudburst 309,264 1 (blank) 8/14/2020 5:30 8/14/2020 7:00 90 0 73,473 0 0 6 Atlas 53,635 1 (blank) 8/22/2020 14:15 8/22/2020 14:15 0 0 56,329 0 0 1 Atlas (blank) 3,943 1 8/23/2020 17:00 8/23/2020 17:45 45 0 1,240,853 0 0 3 Atlas 186,128 1 (blank) 9/3/2020 5:00 9/3/2020 7:15 135 121,977 2 6 Atlas (blank) 140,274 1 CSO056 6 734,217 Total CSO057 7/23/2020 17:30 7/23/2020 17:30 0 0 939 0 0 554 24 Atlas 1 (blank) 7/30/2020 8:30 7/30/2020 19:30 660 3 799 3 2 12 2,126 1 Cloudburst (blank) 8/1/2020 12:15 8/1/2020 12:15 0 0 2.669 3 0 1 Atlas (blank) 347 1 CSO057 3 3.027 Total CSO062 7/1/2020 0:15 7/1/2020 1:30 75 0 195,836,750 0 0 1 3,916,735 1 Atlas (blank) 8/1/2020 23:15 8/2/2020 0:45 90 0 31,152,526 2 0 12 Atlas 5,918,980 1 (blank) 8/14/2020 6:00 8/14/2020 13:00 420 26,354,167 0 0 1 0 6 Atlas (blank) 19,765,625 8/21/2020 19:45 8/21/2020 19:45 0 0 4,059,295 0 0 3 771,266 1 Atlas (blank) 8/23/2020 17:45 105 8/23/2020 19:30 0 23,223,004 0 0 1 Atlas (blank) 5,805,751 1 8/28/2020 23:00 8/29/2020 3:30 270 0 20,899,605 0 0 48 Atlas (blank) 8,359,842 1 9/2/2020 5:15 9/2/2020 5:30 15 0 4,260,760 0 0 3 Atlas 1,278,228 1 (blank) 9/3/2020 4:15 9/3/2020 22:30 1095 0 61,391,894 2 0 6 Atlas 57.094.461 (blank) 1 CSO062 102,910,888 8 Total CSO082 7/1/2020 0:00 7/1/2020 1:30 90 0 0 0 1 3.159.350 1 Atlas 63,187 (blank)

ANTECEDENT

RAIN

FREQUENCY

(YR)

PERIOD

(HR)

STANDARD

COMMENT

DISCHARGE

VOLUME

COUNT



																		Name of Section														
COUNT	1	1	1	1	1	1	1	1	o	1	-	1	-	1	1	1	1	1	1	1	1	80	-	1	1	1	1	20	1	1	2	1
DISCHARGE VOLUME (GAL)	307,107	3,392,553	171,352	645,802	27,651	105,801	42,220	1,352,974	6,108,647	7,568	7,568	6,747	6,747	220	27,317	601	630	537	53	2,438	4,084	35,880	33,939	33,137	76,082	384	9,725	153,267	92,576	1,133,721	1,823,297	165,266
COMMENT	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)		(blank)	- 11	(blank)		(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)		(blank)	(blank)	(blank)	(blank)	(blank)		(blank)	(blank)		(blank)
STANDARD	Atlas	Atlas	Atlas	Atlas	Atlas	Atlas	Atlas	Atlas		Atlas		Atlas		Atlas	Atlas	Atlas	Atlas	Atlas	Atlas	Atlas	Atlas		Atlas	Atlas	Atlas	Atlas	Atlas		Atlas	Cloudburst		Atlas
PERIOD (HR)	24	12	12	9	3	48	3	9		24		ю		1	12	9	24	1	9	3	9		1	1	1	12	1		1	12		1
FREQUENCY (YR)	0	1	0	0	0	0	0	0		0		-		0	1	0	0	0	0	0	-		0	0	0	0	0		0	4		0
ANTECEDENT RAIN	0	2	2	0	0	0	0	2		0		1		0	3	0	0	0	0	0	2		2	2	1	1	0		2	3		-
DISCHARGE PER RAIN	520,520	1,730,894	1,427,933	778,075	106,350	271,285	150,786	1,537,470		13,514		6,024		1,158	11,775	823	1,400	2,557	151	5,670	3,781		1,696,950	84,967	292,623	985	16,767		1,863,719	357,641		1,502,418
RAIN TOTAL (INCH)	0	2	0	0	0	0	0	0		0		1		0	2	0	0	0	0	0	1		0	0	0	0	0		0	3		0
DURATION (MIN)	150	1425	120	330	45	120	45	630		0		0		0	645	0	240	0	0	09	240		30	45	30	0	15		15	15		15
END DATE	7/23/2020 21:45	7/31/2020 9:00	8/2/2020 0:45	8/14/2020 10:45	8/21/2020 20:00	8/29/2020 0:30	9/2/2020 5:45	9/3/2020 14:30		7/23/2020 17:45		7/23/2020 19:30		7/6/2020 17:15	7/30/2020 20:00	8/14/2020 5:15	8/21/2020 18:30	8/23/2020 16:45	8/28/2020 22:30	9/2/2020 4:30	9/3/2020 6:45		7/1/2020 0:30	7/5/2020 19:30	7/6/2020 18:45	7/12/2020 4:45	7/20/2020 15:45		7/25/2020 22:00	7/30/2020 20:30		7/6/2020 17:45
START DATE	7/23/2020 19:15	7/30/2020 9:15	8/1/2020 22:45	8/14/2020 5:15	8/21/2020 19:15	8/28/2020 22:30	9/2/2020 5:00	9/3/2020 4:00		7/23/2020 17:45		7/23/2020 19:30		7/6/2020 17:15	7/30/2020 9:15	8/14/2020 5:15	8/21/2020 14:30	8/23/2020 16:45	8/28/2020 22:30	9/2/2020 3:30	9/3/2020 2:45		7/1/2020 0:00	7/5/2020 18:45	7/6/2020 18:15	7/12/2020 4:45	7/20/2020 15:30		7/25/2020 21:45	7/30/2020 20:15		7/6/2020 17:30
cso									CSO082 Total	CS0083	CSO083 Total	CS0088	CSO088 Total	CS0092								CSO092 Total	CSO097					CSO097 Total	CSO108		CSO108 Total	CSO109



cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	7/20/2020 14:30	7/20/2020 14:30	0	0	68,729	0	0	1	Atlas	(blank)	32,990	1
	7/25/2020 20:45	7/25/2020 21:00	15	0	1,557,544	2	0	1	Atlas	(blank)	140,179	1
	7/30/2020 10:15	7/30/2020 20:30	615	3	244,938	3	2	12	Cloudburst	(blank)	693,175	1
WE'LL	8/1/2020 22:15	8/1/2020 22:15	0	0	245,648	3	0	6	Atlas	(blank)	51,586	1
1 19	8/21/2020 14:30	8/21/2020 18:30	240	0	407,789	0	0	24	Atlas	(blank)	289,530	1
	8/22/2020 14:15	8/22/2020 14:15	0	0	24,324	0	0	24	Atlas	(blank)	17,270	1
	9/3/2020 3:00	9/3/2020 12:15	555	1	125,521	3	1	6	Atlas	(blank)	183,260	1
CSO109 Total											1,573,256	8
CSO111	7/5/2020 17:45	7/5/2020 18:15	30	0	357,573	2	1	1	Atlas	(blank)	214,544	1
	7/20/2020 14:45	7/20/2020 15:00	15	0	16,789	0	1	1	Atlas	(blank)	12,256	.1
	7/23/2020 20:00	7/23/2020 20:00	0	0	3,336	2	0	24	Atlas	(blank)	2,235	1
	7/30/2020 10:15	7/30/2020 20:45	630	2	276,796	3	1	12	Cloudburst	(blank)	661,542	1
	8/1/2020 22:15	8/1/2020 22:15	0	0	17,677	3	0	6	Atlas	(blank)	2,298	1
	8/21/2020 18:30	8/21/2020 18:45	15	0	32,216	0	0	48	Atlas	(blank)	19,974	1
	8/22/2020 14:45	8/22/2020 14:45	0	0	3,152	0	0	48	Atlas	(blank)	1,954	1
	9/2/2020 4:45	9/2/2020 5:00	15	0	22,664	0	0	3	Atlas	(blank)	8,839	1
	9/3/2020 3:00	9/3/2020 7:00	240	1	70,823	2	1	6	Atlas	(blank)	81,446	1
CSO111 Total											1,005,088	9
CSO113	7/6/2020 17:30	7/6/2020 17:30	0	0	184,621	0	0	1	Atlas	(blank)	35,078	1
35.4	7/30/2020 9:30	7/30/2020 20:30	660	2	431,649	3	1	12	Atlas	(blank)	1,001,425	1
	8/23/2020 17:00	8/23/2020 17:00	0	0	122,733	0	0	1	Atlas	(blank)	25,774	1
	9/3/2020 3:00	9/3/2020 6:00	180	1	119,408	2	1	6	Atlas	(blank)	128,961	1
CSO113 Total											1,191,238	4
CSO117	7/30/2020 13:45	7/30/2020 21:30	465	2	4,337,859	3	1	12	Cloudburst	(blank)	10,324,104	1
	8/23/2020 16:30	8/23/2020 16:45	15	0	164,686	0	0	1	Atlas	(blank)	36,231	1
	9/3/2020 6:15	9/3/2020 8:30	135	0	1,109,934	2	0	6	Atlas	(blank)	1,043,338	1
CSO117 Total											11,403,673	3
CSO118	7/5/2020 18:30	7/5/2020 18:30	0	0	271,086	1	0	1	Atlas	(blank)	56,928	1
	7/6/2020 17:30	7/6/2020 17:30	0	0	71,174	0	0	1	Atlas	(blank)	16,370	1
	7/7/2020 22:30	7/7/2020 23:00	30	0	4,322,075	0	0	1	Atlas	(blank)	345,766	1
	7/11/2020 20:15	7/12/2020 4:30	495	0	492,196	0	0	12	Atlas	(blank)	231,332	1
	7/23/2020 17:45	7/23/2020 20:15	150	0	1,455,130	1	0	24	Atlas	(blank)	814,873	-1
EL 100	7/30/2020 8:45	7/30/2020 23:45	900	2	6,123,022	2	1	12	Atlas	(blank)	13,042,036	1

cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	8/1/2020 22:45	8/1/2020 23:00	15	0	64,700	2	0	12	Atlas	(blank)	5,823	1
	8/14/2020 5:30	8/14/2020 9:30	240	0	4,011,325	0	0	6	Atlas	(blank)	2,888,154	1
	8/21/2020 19:00	8/21/2020 19:00	0	0	114,274	0	0	6	Atlas	(blank)	35,425	1
	8/23/2020 16:45	8/23/2020 18:00	75	0	12,428,819	0	0	1	Atlas	(blank)	5,220,104	1
	8/28/2020 21:30	8/28/2020 23:30	120	0	2,099,385	0	0	6	Atlas	(blank)	818,760	1
	9/2/2020 4:00	9/2/2020 5:15	75	0	2,210,181	0	0	3	Atlas	(blank)	685,156	1
	9/3/2020 3:15	9/3/2020 9:45	390	0	5,684,320	2	1	6	Atlas	(blank)	5,400,104	- 1
CSO118 Total											29,560,831	13
CSO119	7/6/2020 17:15	7/6/2020 17:45	30	0	631,104	0	0	1	Atlas	(blank)	145,154	1
	7/22/2020 1:15	7/22/2020 1:15	0	0	62,120	0	0	1	Atlas	(blank)	12,424	1
	7/23/2020 17:30	7/23/2020 19:45	135	0	407,713	1	0	24	Atlas	(blank)	228,319	1
	7/30/2020 8:30	7/30/2020 21:15	765	2	702,443	2	1	12	Atlas	(blank)	1,496,204	1
CSO119 Total											1,882,101	4
CSO121	7/6/2020 17:30	7/6/2020 17:45	15	0	615,222	0	0	1	Atlas	(blank)	110,740	1
	7/7/2020 22:30	7/7/2020 22:45	15	0	248,959	0	0	1	Atlas	(blank)	54,771	1
	7/11/2020 20:00	7/11/2020 20:15	15	0	87,635	0	0	12	Atlas	(blank)	45,570	1
	7/23/2020 17:45	7/23/2020 19:45	120	0	428,085	0	0	24	Atlas	(blank)	252,570	1
	7/30/2020 9:00	7/30/2020 21:45	765	2	400,471	2	1	12	Atlas	(blank)	784,924	1
	8/1/2020 22:30	8/1/2020 22:30	0	0	112,875	2	0	12	Atlas	(blank)	13,545	1
	8/14/2020 5:00	8/14/2020 9:00	240	0	567,035	0	0	6	Atlas	(blank)	470,639	1
	8/21/2020 18:45	8/21/2020 18:45	0	0	163,138	0	0	3	Atlas	(blank)	42,416	1
	8/23/2020 17:00	8/24/2020 8:30	930	0	1,857,246	0	0	1	Atlas	(blank)	761,471	1
	8/27/2020 19:30	8/27/2020 19:30	0	0	121,221	0	0	48	Atlas	(blank)	47,276	1
	8/28/2020 20:15	8/28/2020 23:00	165	0	392,215	1	0	48	Atlas	(blank)	152,964	1
	9/2/2020 3:45	9/2/2020 5:00	75	0	523,568	0	0	3	Atlas	(blank)	146,599	1
	9/3/2020 3:00	9/3/2020 11:45	525	0	794,773	2	0	6	Atlas	(blank)	699,400	1
	9/28/2020 12:45	9/28/2020 12:45	0	0	39,324	0	0	6	Atlas	(blank)	6,685	1
CSO121 Total						=	-A10				3,589,570	14
CSO125	7/6/2020 18:00	7/6/2020 19:15	75	0	7,929	0	0	1	Atlas	(blank)	1,903	1
	7/11/2020 20:00	7/12/2020 1:45	345	0	9,984	0	0	12	Atlas	(blank)	3,794	1
	7/22/2020 1:45	7/22/2020 9:00	435	0	12,437	0	0	1	Atlas	(blank)	4,726	1
	7/25/2020 21:30	7/25/2020 21:30	0	0	32,000	2	0	1	Atlas	(blank)	320	1
	7/30/2020 10:00	7/30/2020 22:30	750	2	256,398	3	1	12	Atlas	(blank)	589,715	1
	8/1/2020 18:00	8/1/2020 22:45	285	0	32,991	3	0	12	Atlas	(blank)	3,629	1





cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	8/14/2020 5:00	8/14/2020 9:45	285	1	25,721	1	1	6	Atlas	(blank)	32,666	1
31	8/21/2020 19:00	8/21/2020 21:15	135	0	26,181	0	1	1	Atlas	(blank)	23,563	1
	8/22/2020 6:15	8/22/2020 15:30	555	0	6,449	0	1	1	Atlas	(blank)	5,804	1
	8/28/2020 22:30	8/30/2020 3:45	1755	0	128,969	1	0	48	Atlas	(blank)	79,961	1
	8/31/2020 13:00	9/1/2020 0:00	660	0	353,875	0	0	1	Atlas	(blank)	56,620	1
	9/2/2020 4:00	9/2/2020 5:15	75	0	2,529	1	0	3	Atlas	(blank)	1,062	1
	9/3/2020 3:00	9/3/2020 14:00	660	1	112,459	3	1	6	Atlas	(blank)	148,446	1
CSO125 Total		4 4 5 4 4 5 4 5 4 5 6 6 6 6 6 6 6 6 6 6							T. Line		952,209	13
CSO126	7/22/2020 1:30	7/22/2020 1:30	0	0	5,755	0	0	1	Atlas	(blank)	2,187	1
	7/23/2020 17:45	7/23/2020 20:15	150	1	7,882	2	1	3	Atlas	(blank)	10,404	1
	7/30/2020 11:00	7/30/2020 13:30	150	2	5,300	2	1	12	Atlas	(blank)	12,189	1
T. A	7/31/2020 4:30	7/31/2020 4:45	15	2	3,157	2	1	12	Atlas	(blank)	7,261	1
CSO126 Total											32,041	4
CSO127	7/6/2020 17:30	7/6/2020 18:15	45	0	1,591,305	1	0	1	Atlas	(blank)	588,783	1
	7/11/2020 20:00	7/12/2020 4:15	495	0	10,135	0	0	12	Atlas	(blank)	4,358	1
	7/13/2020 20:30	7/14/2020 10:45	855	Discharge	0	0				(blank)	80,120	
	7/20/2020 14:45	7/20/2020 16:30	105	0	687,706	0	0	1	Atlas	(blank)	116,910	1
	7/22/2020 1:15	7/22/2020 3:30	135	0	41,359	0	0	1	Atlas	(blank)	13,235	1
	7/22/2020 17:15	7/22/2020 21:45	270	1	7,974	0	1	3	Atlas	(blank)	10,366	1
	7/23/2020 6:45	7/23/2020 9:45	180	1	23,782	0	1	3	Atlas	(blank)	30,917	1
	7/23/2020 18:00	7/23/2020 20:00	120	1	673,354	2	1	3	Atlas	(blank)	875,360	1
	7/30/2020 8:45	7/30/2020 22:15	810	3	1,856,725	4	2	12	Cloudburst	(blank)	5,291,667	1
	8/1/2020 17:45	8/1/2020 22:45	300	0	142,261	3	0	1	Atlas	(blank)	25,607	1
	8/14/2020 4:45	8/14/2020 9:15	270	1	58,616	1	1	6	Atlas	(blank)	69,167	1
	8/21/2020 14:45	8/21/2020 19:15	270	1	1,273,272	1	1	1	Atlas	(blank)	1,617,056	1
PROPERTY OF	8/22/2020 14:30	8/22/2020 15:00	30	0	9,085	1	0	3	Atlas	(blank)	1,817	1
	8/23/2020 16:45	8/23/2020 17:45	60	0	77,063	2	0	3	Atlas	(blank)	48,550	1
	8/28/2020 20:45	8/28/2020 22:45	120	0	16,252	1	0	48	Atlas	(blank)	8,776	1
	9/2/2020 4:00	9/2/2020 5:15	. 75	0	221,490	1	0	3	Atlas	(blank)	108,530	1
	9/3/2020 3:00	9/3/2020 14:30	690	1	344,449	3	1	6	Atlas	(blank)	475,340	1
CSO127 Total											9,366,559	16
CSO131	7/22/2020 1:30	7/22/2020 1:30	0	0	8,544	0	0	6	Atlas	(blank)	2,136	1
30	7/30/2020 14:00	7/30/2020 20:00	360	2	51,583	3	1	12	Atlas	(blank)	99,040	1

cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	8/14/2020 5:45	8/14/2020 6:45	60	0	13,313	0	0	6	Atlas	(blank)	12,381	1
	8/21/2020 18:45	8/21/2020 19:00	15	0	215,230	0	0	3	Atlas	(blank)	58,112	1
	9/3/2020 5:15	9/3/2020 5:45	30	1	101,097	1	1	6	Atlas	(blank)	101,097	1
CSO131 Total											272,766	5
CSO132	7/1/2020 0:00	7/2/2020 0:00	1440	0	5,296,900	1	0	1	Atlas	(blank)	158,907	1
	7/22/2020 2:00	7/23/2020 0:00	1320	0	1,219,175	0	0	1	Atlas	(blank)	438,903	1
	7/23/2020 18:15	7/24/2020 0:00	345	1	488,651	2	1	3	Atlas	(blank)	522,857	1
	7/30/2020 10:15	8/1/2020 0:00	2265	2	3,286,179	3	1	12	Atlas	(blank)	6,572,358	1
	8/1/2020 0:00	8/1/2020 0:00	0	0	101,683	2	0	12	Atlas	(blank)	12,202	1
	8/14/2020 6:00	8/15/2020 0:00	1080	1	216,548	1	1	6	Atlas	(blank)	223,044	1
	8/21/2020 19:15	8/22/2020 0:00	285	0	676,430	0	0	3	Atlas	(blank)	270,572	1
	9/2/2020 4:30	9/3/2020 23:00	2550	0	4,190,707	2	0	3	Atlas	(blank)	1,215,305	1
CSO132 Total											9,414,148	8
CSO140	7/23/2020 19:30	7/23/2020 19:30	0	0	32,593	1	0	24	Atlas	(blank)	22,815	- 1
	7/30/2020 10:15	7/30/2020 21:00	645	2	581,265	2	1	12	Atlas	(blank)	1,185,780	1
	9/3/2020 5:00	9/3/2020 7:30	150	0	407,959	2	1	6	Atlas	(blank)	399,800	1
CSO140 Total		- 2									1,608,395	3
CSO141	7/30/2020 10:15	7/30/2020 10:15	0	2	49	1	1	12	Atlas	(blank)	97	1
	7/30/2020 19:15	7/30/2020 19:15	0	2	54	2	1	12	Atlas	(blank)	105	1
	8/14/2020 5:15	8/14/2020 5:30	15	0	29,127	0	0	6	Atlas	(blank)	24,175	1
	8/23/2020 17:00	8/23/2020 17:30	30	0	2,602	0	0	1	Atlas	(blank)	1,067	1
	9/3/2020 5:15	9/3/2020 7:00	105	0	1,645	2	0	6	Atlas	(blank)	1,448	1
CSO141 Total				-							26,892	5
CSO142	7/5/2020 18:15	7/5/2020 18:15	0	0	10,783	1	0	1	Atlas	Retained by Sneads Branch	2,480	1
	7/6/2020 17:30	7/6/2020 17:30	0	0	75,050	0	0	1	Atlas	Retained by Sneads Branch	4,503	1
	7/30/2020 9:30	7/30/2020 20:15	645	2	80,039	3	1	12	Atlas	(blank)	180,889	1
	8/14/2020 5:30	8/14/2020 5:30	0	0	1,585	0	0	6	Atlas	Retained by Sneads Branch	967	1
	8/21/2020 18:45	8/21/2020 18:45	0	0	1,524	0	0	24	Atlas	Retained by Sneads Branch	518	1
	8/23/2020 16:45	8/23/2020 17:00	15	0	381,033	0	0	1	Atlas	Retained by Sneads Branch	34,293	1
	9/2/2020 3:45	9/2/2020 4:45	60	0	45,265	0	0	3	Atlas	(blank)	16,748	1



START DATE

END DATE

DURATION

RAIN

DISCHARGE



PROJECT WIN QUARTERLY REPORT #60

JULY 1, 2020 - SEPTEMBER 30, 2020

### CSO (MIN) TOTAL PER RAIN RAIN (YR) (HR) VOLUME (INCH) (GAL) Retained by Sneads 9/3/2020 3:00 9/3/2020 5:45 165 0 46.637 2 6 1 Atlas 43,839 1 Branch CSO142 284,237 8 Total CSO144 7/23/2020 19:30 7/23/2020 19:30 0 1 78,439 1 1 3 89,420 Atlas 1 (blank) 7/30/2020 9:30 2 7/30/2020 10:15 45 90.010 2 1 12 Cloudburst (blank) 223,224 1 7/30/2020 19:15 7/30/2020 19:30 15 2 10,871 2 1 12 Cloudburst (blank) 26,961 1 8/21/2020 18:30 8/21/2020 18:30 0 0 0 22,809 0 1 1 Atlas (blank) 14,826 9/3/2020 5:30 9/3/2020 5:30 0 1 163 2 1 6 Atlas 171 1 (blank) CSO144 5 354,602 Total CSO146 7/30/2020 10:15 7/30/2020 10:15 0 2 882 1 12 Atlas (blank) 1,993 1 9/3/2020 3:15 9/3/2020 5:00 105 0 5.859 1 6 Atlas (blank) 5.507 1 CSO146 2 7,500 Total CSO148 7/5/2020 18:00 7/5/2020 18:15 15 0 22.236 2 0 1 Atlas (blank) 8,672 1 7/6/2020 17:30 7/6/2020 17:30 0 0 127,042 0 1 1 Atlas (blank) 33,031 1 7/20/2020 14:30 7/20/2020 14:30 0 0 27,228 0 0 1 Atlas (blank) 15,792 1 7/22/2020 17:00 7/22/2020 17:00 0 0 0 0 52.436 1 Atlas (blank) 5,768 1 7/30/2020 9:30 7/30/2020 20:30 660 2 159,015 3 1 12 367,325 1 Atlas (blank) 8/1/2020 17:45 8/1/2020 17:45 0 0 424 3 0 6 Atlas (blank) 72 1 8/14/2020 4:45 15 8/14/2020 5:00 1 12,330 0 0 6 Atlas (blank) 12,577 1 8/21/2020 14:30 8/21/2020 18:30 240 0 0 33.076 0 12 Atlas (blank) 29,768 1 8/22/2020 14:15 8/22/2020 14:30 15 0 13,743 0 0 12 Atlas (blank) 12,369 1 9/2/2020 4:30 15 9/2/2020 4:45 0 30,412 1 0 3 Atlas (blank) 12.469 1 9/3/2020 3:00 9/3/2020 6:00 180 1 2 70,881 1 6 Atlas (blank) 90,728 1 CSO148 588,571 11 Total CSO149 7/30/2020 19:15 7/30/2020 19:15 0 2 93,847 2 1 12 Atlas (blank) 212,094 CSO149 212,094 Total 7/5/2020 18:15 CSO151 7/5/2020 18:45 30 0 86,116 2 0 1 Atlas (blank) 27,557 1 7/6/2020 17:45 7/6/2020 18:15 30 0 475,289 1 0 1 Atlas (blank) 218,633 1 7/11/2020 20:15 7/12/2020 4:30 495 0 300.303 1 0 12 Atlas 120,121 1 (blank) 7/20/2020 14:45 7/20/2020 15:30 45 0 0 0 259,805 1 Atlas 103,922 1 (blank) 7/22/2020 1:45 7/22/2020 1:45 0 0 13,800 0 0 1 Atlas (blank) 2,484 1 7/22/2020 17:30 7/22/2020 17:30 0 0 0 284,525 0 1 1 Atlas (blank) 22,762 7/23/2020 7:45 45 0 7/23/2020 8:30 69,643 0 0 24 Atlas 41,786 1 (blank)

ANTECEDENT

PERIOD

STANDARD

COMMENT

DISCHARGE

COUNT

FREQUENCY

CSO

START DATE

7/23/2020 18:15

7/25/2020 21:15

7/30/2020 9:15

8/1/2020 18:00

8/23/2020 17:15

8/23/2020 17:15

END DATE

7/23/2020 19:45

7/25/2020 21:45

7/30/2020 21:30

8/1/2020 22:45

DURATION

(MIN)

90

30

735

285

RAIN

TOTAL

(INCH)

0

0

2

0

DISCHARGE

PER RAIN

92,537

16,147,900

1,030,699

1,025,617

129,455

ANTECEDENT

RAIN

1

1

3

3

FREQUENCY

(YR)

0

0

1

0

PERIOD

(HR)

24

1

12

12

STANDARD

Atlas

Atlas

Atlas

Atlas

COMMENT

(blank)

(blank)

(blank)

(blank)

	0/1/2020 10.00	0/1/2020 22.40	200		1,020,017	-		12-	7 10.00	(		
	8/14/2020 5:00	8/14/2020 9:15	255	0	271,300	0	0	6	Atlas	(blank)	249,596	1
	8/21/2020 15:00	8/21/2020 19:15	255	0	405,032	0	0	12	Atlas	(blank)	267,321	1
	8/22/2020 14:30	8/22/2020 15:00	30	0	136,247	0	0	12	Atlas	(blank)	89,923	1
	8/23/2020 17:15	8/23/2020 17:30	15	0	93,483	1	0	1 -	Atlas	(blank)	43,002	1
	8/28/2020 21:45	8/28/2020 23:15	90	0	131,379	1	0	24	Atlas	(blank)	49,924	1
	9/2/2020 4:30	9/2/2020 5:30	60	0	303,687	0	0	3	Atlas	(blank)	136,659	1
	9/3/2020 3:15	9/3/2020 9:45	390	1	428,109	2	1	6	Atlas	(blank)	492,325	1
CSO151 Total											4,525,163	18
CSO153	7/6/2020 17:30	7/6/2020 17:45	15	0	374,211	0	0	1	Atlas	(blank)	67,358	1
	7/11/2020 19:45	7/12/2020 4:00	495	0	120,390	0	0	12	Atlas	(blank)	62,603	1
	7/20/2020 14:30	7/20/2020 14:30	0	0	40,575	0	0	1	Atlas	(blank)	4,869	1
	7/22/2020 1:15	7/22/2020 1:15	0	0	662,285	0	0	1	Atlas	(blank)	86,097	1
	7/23/2020 17:30	7/23/2020 20:00	150	0	545,834	0	0	24	Atlas	(blank)	322,042	1
	7/30/2020 8:45	7/30/2020 20:15	690	2	563,018	2	1	12	Atlas	(blank)	1,103,516	-1
	7/31/2020 6:45	7/31/2020 8:00	75	2	21,547	2	1	12	Atlas	(blank)	42,232	1
	8/1/2020 22:30	8/1/2020 23:15	45	0	156,575	2	0	12	Atlas	(blank)	18,789	1
	8/14/2020 4:45	8/14/2020 10:30	345	0	851,613	0	0	6	Atlas	(blank)	706,839	1
	8/21/2020 18:45	8/21/2020 20:00	75	0	271,938	0	0	3	Atlas	(blank)	70,704	1
	8/23/2020 17:00	8/23/2020 17:45	45	0	538,917	0	0	1	Atlas	(blank)	220,956	1
	8/27/2020 19:30	8/27/2020 19:30	0	0	61,500	0	0	48	Atlas	(blank)	23,985	1
	8/28/2020 21:30	8/28/2020 23:45	135	0	295,741	0	0	48	Atlas	(blank)	115,339	1
	8/31/2020 5:30	8/31/2020 5:30	0	0	54,408	0	0	1	Atlas	(blank)	6,529	1
	9/2/2020 3:45	9/2/2020 5:45	120	0	490,421	0	0	3	Atlas	(blank)	137,318	1
	9/3/2020 3:00	9/3/2020 7:30	270	0	639,531	2	0	6	Atlas	(blank)	562,787	1
	9/28/2020 12:45	9/28/2020 12:45	0	0	21,700	0	0	6	Atlas	(blank)	3,689	1
CSO153 Total											3,555,652	17
CSO154	7/30/2020 20:00	7/30/2020 20:45	45	2	89,805	2	1	12	Atlas	(blank)	179,610	1
CSO154 Total											179,610	1
CSO160	7/30/2020 9:30	7/30/2020 9:30	0	3	1,821	1	2	12	Cloudburst	(blank)	4,844	1



PROJECT WIN QUARTERLY REPORT #60 JULY 1, 2020 - SEPTEMBER 30, 2020

DISCHARGE

VOLUME

(GAL)

55,522

161,479

2.319.073

123,074

25,891

(blank)

Atlas

COUNT

1

1



cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO160 Total			WARNING CO.			0,000					30,735	2
CSO161	7/7/2020 22:15	7/7/2020 22:30	15	0	61,017	0	0	1	Atlas	(blank)	14,644	1
	7/23/2020 17:30	7/23/2020 17:30	0	0	283	0	0	24	Atlas	(blank)	167	1
47.5	7/30/2020 9:30	7/30/2020 9:30	0	3	3,880	1	2	12	Cloudburst	(blank)	10,322	1
We. R	7/30/2020 19:30	7/30/2020 19:30	0	3	390	3	2	12	Cloudburst	(blank)	1,038	1
	8/14/2020 5:30	8/14/2020 5:30	0	0	5,087	0	0	6	Atlas	(blank)	2,696	1
	8/23/2020 17:00	8/23/2020 17:15	15	0	217,480	0	0	3	Atlas	(blank)	43,496	1
	9/2/2020 3:45	9/2/2020 3:45	0	0	116	0	0	3	Atlas	(blank)	43	1
	9/3/2020 5:00	9/3/2020 5:00	0	0	351	1	0	6	Atlas	(blank)	316	1
CSO161 Total											72,722	8
CSO166	7/1/2020 0:00	7/1/2020 0:45	45	0	5,084,180	2	0	1	Atlas	(blank)	254,209	1
2 / 3/	7/6/2020 17:45	7/6/2020 18:15	30	0	276,346	1	0	1	Atlas	(blank)	102,248	1
	7/22/2020 1:45	7/22/2020 2:00	15	0	295,941	0	0	1	Atlas	(blank)	94,701	1
	7/22/2020 17:30	7/22/2020 17:30	0	1	6,451	0	1	3	Atlas	(blank)	8,386	1
	7/23/2020 17:45	7/23/2020 21:00	195	1 _	2,490,285	2	1	3	Atlas	(blank)	3,237,370	1
A. Ly	7/30/2020 9:45	7/31/2020 4:15	1110	3	2,924,877	4	2	12	Cloudburst	(blank)	8,335,900	1
1 - 1	8/1/2020 18:00	8/1/2020 23:15	315	0	2,012,783	3	0	1	Atlas	(blank)	362,301	1
	8/14/2020 5:15	8/14/2020 9:45	270	1	253,886	1	1	6	Atlas	(blank)	299,585	1
- 192	8/21/2020 18:15	8/21/2020 19:30	75	1	531,672	1	1	1	Atlas	(blank)	675,224	1
	8/22/2020 14:30	8/22/2020 14:30	0	0	121,545	1	0	3	Atlas	(blank)	24,309	1
	8/28/2020 23:00	8/28/2020 23:15	15	0	334,617	1	0	48	Atlas	(blank)	180,693	1
Comp. N	9/2/2020 4:15	9/2/2020 5:30	75	0	773,024	1	0	3	Atlas	(blank)	378,782	1
	9/3/2020 3:15	9/3/2020 13:45	630	1	1,635,617	3	1	6	Atlas	(blank)	2,257,152	1
CSO166 Total											16,210,860	13
CSO167	7/1/2020 22:45	7/2/2020 0:00	75	0	4,633	1	0	1	Atlas	(blank)	139	1
	7/22/2020 2:00	7/23/2020 0:00	1320	0	19,825	0	0	1	Atlas	(blank)	7,137	1
	7/23/2020 18:15	7/24/2020 0:00	345	1	7,946	2	1	3	Atlas	(blank)	8,502	1
	7/30/2020 10:15	8/1/2020 0:00	2265	2	53,434	3	1 -	12	Atlas	(blank)	106,868	1
	8/1/2020 0:00	8/1/2020 0:00	0	0	1,650	2	0	12	Atlas	(blank)	198	1
n de la	8/14/2020 6:00	8/15/2020 0:00	1080	1	3,520	1	- 1	6	Atlas	(blank)	3,626	1
	8/21/2020 19:15	8/22/2020 0:00	285	0	11,000	0	0	3	Atlas	(blank)	4,400	1
	9/2/2020 4:30	9/3/2020 23:00	2550	0	68,141	2	0	3	Atlas	(blank)	19,761	1
CSO167 Total						10.					150,631	8



cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO174	7/5/2020 18:00	7/5/2020 18:30	30	0	3,218,291	1	0	1	Atlas	Retained by Sneads Branch	740,207	1
	7/11/2020 20:30	7/11/2020 20:30	0	0	6,115	0	0	12	Atlas	Retained by Sneads Branch	2,813	1
	7/20/2020 14:45	7/20/2020 15:00	15	0	243,402	0	0	1	Atlas	Retained by Sneads Branch	133,871	1
	7/23/2020 19:30	7/23/2020 20:00	30	0	498,727	1	0	1	Atlas	Retained by Sneads Branch	279,287	1
	7/30/2020 9:30	7/30/2020 20:45	675	2	1,416,773	3	1	12	Atlas	(blank)	3,201,907	1
	8/1/2020 22:15	8/1/2020 22:15	0	0	485,600	3	0	12	Atlas	Retained by Sneads Branch	43,704	1
	8/14/2020 4:45	8/14/2020 4:45	0	0	21,910	0	0	6	Atlas	Retained by Sneads Branch	13,365	1
	8/21/2020 18:45	8/21/2020 18:45	0	0	3,606	0	0	24	Atlas	Retained by Sneads Branch	1,226	1
	8/22/2020 14:30	8/22/2020 14:45	15	0	214,482	0	0	24	Atlas	Retained by Sneads Branch	72,924	1
	9/2/2020 4:45	9/2/2020 5:00	15	0	280,070	0	0	3	Atlas	(blank)	103,626	1
i i	9/3/2020 3:00	9/3/2020 7:00	240	0	1,188,995	2	1	6	Atlas	Retained by Sneads Branch	1,117,655	1
CSO174 Total					- 50						5,710,585	11
CSO180	7/20/2020 14:15	7/20/2020 14:30	15	0	78,115	0	0	1	Atlas	Retained by Sneads Branch	42,963	1
4	7/23/2020 19:15	7/23/2020 19:15	0	0	24,020	1	0	1	Atlas	Retained by Sneads Branch	13,451	1
1 14	7/30/2020 8:30	7/30/2020 20:15	705	2	382,423	3	1	12	Atlas	(blank)	864,275	1
	9/3/2020 5:15	9/3/2020 5:15	0	0	110,803	1	1	6	Atlas	Retained by Sneads Branch	104,155	1
CSO180 Total									2		1,024,844	4
CSO181	7/30/2020 9:15	7/30/2020 9:15	0	2	59,031	1	1	12	Cloudburst	(blank)	144,035	1
	7/30/2020 19:15	7/30/2020 19:15	0	2	24,046	2	1	12	Cloudburst	(blank)	58,673	1
	8/23/2020 16:45	8/23/2020 17:00	15	0	5,242,560	0	0	1	Atlas	(blank)	786,384	1
CSO181 Total							a la				989,092	3
CSO183	7/5/2020 17:45	7/5/2020 18:00	15	0	35,555	1	1	1	Atlas	Retained by Sneads Branch	26,311	1
	9/3/2020 5:45	9/3/2020 5:45	0	1	29	2	1	6	Atlas	Retained by Sneads Branch	32	1



cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO183 Total											26,343	2
CSO184	7/5/2020 17:45	7/5/2020 18:15	30	0	313,462	1	1	1	Atlas	Retained by Sneads Branch	231,962	1
	7/23/2020 19:45	7/23/2020 19:45	0	1	21,389	3	0	1	Atlas	Retained by Sneads Branch	21,389	1
	7/30/2020 10:15	7/30/2020 20:15	600	2	114,251	3	1	12	Cloudburst	(blank)	269,633	1
	9/3/2020 5:00	9/3/2020 5:45	45	1	12,076	2	1	6	Atlas	Retained by Sneads Branch	13,163	1
CSO184 Total											536,147	4
CSO185	7/11/2020 20:15	7/11/2020 20:15	0	0	3,002	0	0	12	Atlas	Retained by Sneads Branch	1,411	1
	7/20/2020 14:30	7/20/2020 15:00	30	2	4,373	2	5	1	Atlas	Retained by Sneads Branch	7,478	1
	7/22/2020 17:00	7/22/2020 17:00	0	1	1,180	2	0	1	Atlas	Retained by Sneads Branch	1,180	1
	7/23/2020 19:30	7/23/2020 20:00	30	1	91,629	3	0	1	Atlas	Retained by Sneads Branch	91,629	1
	7/30/2020 10:15	7/30/2020 20:30	615	2	420,212	3	1	12	Cloudburst	(blank)	991,701	1
	8/1/2020 22:15	8/1/2020 22:15	0	0	39,671	3	0	6	Atlas	Retained by Sneads Branch	5,554	1
	8/14/2020 4:30	8/14/2020 4:45	15	0	2,066	0	0	24	Atlas	Retained by Sneads Branch	2,025	1
	8/21/2020 18:30	8/21/2020 18:30	0	0	2,724	0	0	24	Atlas	Retained by Sneads Branch	1,362	1
	8/22/2020 14:30	8/22/2020 14:30	0	0	4,948	0	0	24	Atlas	Retained by Sneads Branch	2,474	1
	9/2/2020 4:45	9/2/2020 4:45	0	0	13,475	1	0	3	Atlas	(blank)	5,929	1
	9/3/2020 3:00	9/3/2020 6:00	180	1	93,345	2	1	6	Atlas	Retained by Sneads Branch	101,746	1
CSO185 Total		The state of the s								- 10	1,212,489	11
CSO187	7/30/2020 13:30	7/30/2020 19:00	330	2	24,147	2	1	12	Atlas	(blank)	54,573	1
	9/3/2020 5:00	9/3/2020 5:00	0	0	10,659	1	1	6	Atlas	Retained by Sneads Branch	10,019	1
CSO187 Total											64,592	2
CSO188	7/30/2020 19:15	7/30/2020 19:30	15	2	8,649	2	1	12	Atlas	(blank)	19,547	1
CSO188 Total											19,547	1

cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO190	7/30/2020 9:30	7/30/2020 10:30	60	2	30,243	1	1	12	Cloudburst	(blank)	72,584	1
	7/30/2020 19:30	7/30/2020 20:30	60	2	92,518	2	1	12	Cloudburst	(blank)	222,042	1
	8/14/2020 6:30	8/14/2020 8:00	90	-1	205,646	1	1	6	Atlas	(blank)	228,267	1
	9/3/2020 4:45	9/3/2020 7:00	135	1	326,440	3	1	3	Atlas	(blank)	457,016	1
CSO190 Total											979,909	4
CSO191	8/13/2020 15:00	8/13/2020 19:30	270	1	109	0	0	6	Atlas	(blank)	117	1
	8/14/2020 7:15	8/14/2020 20:45	810	1	73,839	1	0	6	Atlas	(blank)	79,008	1
	8/22/2020 15:15	8/22/2020 23:30	495	0	881,282	0	0	1	Atlas	(blank)	334,887	1
	8/28/2020 23:45	8/29/2020 0:30	45	0	38	0	0	3	Atlas	(blank)	19	1
	9/2/2020 5:45	9/2/2020 8:15	150	0	159	0	0	3	Atlas	(blank)	54	1
	9/3/2020 3:15	9/3/2020 19:30	975	1	1,013,223	2	1	6	Atlas	(blank)	1,307,058	1
CSO191 Total											1,721,143	6
CSO193	7/23/2020 19:00	7/23/2020 19:30	30	0	1,393	1	0	24	Atlas	(blank)	933	1
	7/30/2020 10:00	7/30/2020 10:00	0	3	721	2	1	12	Cloudburst	(blank)	1,838	1
	7/30/2020 18:45	7/30/2020 20:00	75	3	1,349	3	1	12	Cloudburst	(blank)	3,440	1
	9/3/2020 4:45	9/3/2020 5:15	30	1	2,360	2	1	6	Atlas	(blank)	2,525	1
CSO193 Total											8,736	4
CSO195	7/30/2020 19:15	7/30/2020 19:30	15	2	136	2	1	12	Atlas	(blank)	308	1
CSO195 Total											308	1
CSO196	7/5/2020 18:15	7/5/2020 18:15	0	0	10,835	0	0	1	Atlas	(blank)	2,167	1
	7/30/2020 9:30	7/30/2020 20:15	645	2	66,555	3	1	12	Atlas	(blank)	151,080	1
	9/3/2020 5:00	9/3/2020 5:15	15	0	17,025	1	1	6	Atlas	(blank)	16,174	1
CSO196 Total		71									169,421	3
CSO197	7/23/2020 19:00	7/23/2020 19:15	15	0	1,741	2	0	1	Atlas	(blank)	1,097	1
	7/30/2020 11:45	7/30/2020 19:15	450	2	2,597	2	1	12	Atlas	(blank)	5,895	1
	9/3/2020 4:45	9/3/2020 5:00	15	0	1,625	1	1	6	Atlas	(blank)	1,544	1
CSO197 Total		1 - 1									8,536	3
CSO198	7/23/2020 19:15	7/23/2020 19:15	0	0	5,170	2	0	1	Atlas	(blank)	3,257	1
	7/30/2020 13:30	7/30/2020 20:00	390	2	14,424	3	1	12	Atlas	(blank)	32,743	1
	9/3/2020 4:45	9/3/2020 5:00	15	0	4,727	1	1	6	Atlas	(blank)	4,491	1
CSO198 Total	Control of the contro										40,491	3





cso	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO199	7/5/2020 18:00	7/5/2020 18:15	15	0	25,155	0	0	1	Atlas	(blank)	5,031	1
	7/23/2020 19:30	7/23/2020 19:45	15	0	13,844	2	0	1	Atlas	(blank)	8,722	1
	7/30/2020 9:30	7/30/2020 20:30	660	2	39,659	3	1	12	Atlas	(blank)	90,025	1
	9/2/2020 4:45	9/2/2020 4:45	0	0	206	0	0	3	Atlas	(blank)	64	1
	9/3/2020 5:00	9/3/2020 5:30	30	0	13,947	1	1	6	Atlas	(blank)	13,250	1
CSO199 Total											117,092	5
CSO201	7/24/2020 3:00	7/24/2020 3:00	0	0	49,163	1	0	24	Atlas	(blank)	32,939	1
	7/28/2020 2:15	7/28/2020 2:15	0	0	3,369,100	0	0	1	Atlas	(blank)	33,691	1
	7/30/2020 9:30	7/30/2020 19:45	615	3	11,867	3	1	12	Cloudburst	(blank)	30,262	1
CSO201 Total											96,892	3
CSO202	7/5/2020 18:00	7/5/2020 18:15	15	0	40,590	0	0	1 - 1	Atlas	(blank)	8,118	1
	7/23/2020 17:45	7/23/2020 19:45	120	0	10,973	2	0	1	Atlas	(blank)	6,913	1
	7/30/2020 8:30	7/30/2020 20:15	705	2	20,695	3	1	12	Atlas	(blank)	46,977	1
	9/2/2020 3:45	9/2/2020 4:45	60	0	4,706	0	0	3	Atlas	(blank)	1,459	1
	9/3/2020 4:45	9/3/2020 5:15	30	0	9,621	1	1	6	Atlas	(blank)	9,140	1
CSO202 Total											72,607	5
CSO203	7/23/2020 19:15	7/23/2020 19:15	0	0	51	2	0	1	Atlas	(blank)	32	1
	7/30/2020 13:45	7/30/2020 19:30	345	2	12,726	2	1	12	Atlas	(blank)	28,889	1
CSO203 Total					W-1						28,921	2
CSO205	7/5/2020 17:45	7/5/2020 18:30	45	0	7,943	1	0	1	Atlas	Retained by Sneads Branch	4,210	1
	7/11/2020 20:15	7/11/2020 20:15	0	0	163	0	0	12	Atlas	Retained by Sneads Branch	67	1
	7/20/2020 14:30	7/20/2020 15:00	30	1	191	1	1	1	Atlas	Retained by Sneads Branch	233	1
	7/22/2020 17:00	7/22/2020 17:00	0	0	1,667	1	0	1	Atlas	Retained by Sneads Branch	50	1
	7/23/2020 7:15	7/23/2020 7:15	0	0	101	2	0	1	Atlas	Retained by Sneads Branch	77	1
	7/23/2020 19:45	7/23/2020 19:45	0	0	175	2	0	1	Atlas	Retained by Sneads Branch	133	1
	7/30/2020 8:30	7/30/2020 19:30	660	3	4,325	3	1	12	Cloudburst	(blank)	10,899	1
	8/21/2020 18:45	8/21/2020 18:45	0	0	5	0	0	24	Atlas	Retained by Sneads Branch	2	1



2         110,679         1         1         12         Cloudburst         (blank)         26,056         1           2         6,053         2         1         12         Cloudburst         (blank)         14,769         1           1         16,973         1         1         1         Atlas         (blank)         140,825         2           0         186,435         0         0         3         Atlas         (blank)         191,866         1           0         186,435         0         0         3         Atlas         (blank)         191,866         1           1         186,435         0         0         3         Atlas         (blank)         191,866         1           0         186,435         1         6         Atlas         (blank)         62,748         1           0         25,555,200         0         0         3         Atlas         (blank)         1,022,286         1           0         94,334,107         0         0         6         Atlas         (blank)         150,144,256         1           1         46,387,548         2         1         6         Atlas	START DATE END DATE	END DAT	e e	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
10,679         1         12         Cloudburst         (blank)         26,056           6,053         2         1         12         Cloudburst         (blank)         14,769           169,793         1         1         Atlas         (blank)         191,866           186,435         0         0         3         Atlas         (blank)         191,866           125,496         1         0         3         Atlas         (blank)         95,082           125,496         1         0         3         Atlas         (blank)         36,082           305,266         2         1         6         Atlas         (blank)         384,535           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,468,311           46,387,548         2         1         6         Atlas         (blank)         58,48,317           46,387,548         2         1         6         Atlas         (blank) <td></td> <td>15,671</td> <td>8</td>												15,671	8
6,053         2         1         12         Cloudburst         (blank)         14,769           169,793         1         1         1         Atlas         (blank)         191,866           186,435         0         0         3         Atlas         (blank)         191,866           125,496         1         0         3         Atlas         (blank)         62,748           305,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         150,144,256           57,747,791         3         1         12         Cloudburst         (blank)         58,483,311           46,387,548         2         1         6         Atlas         (blank)         58,483,311           46,387,548         2         1         6         Atlas         (blank)         58,48,291,759           46,387,548         2         1         6         Atlas         (blank)         58,48,291,759	7/30/2020 9:00 7/30/2020 9:00 0		0		2	10,679	1	1	12	Cloudburst	(blank)	26,056	1
169,793         1         Atlas         (blank)         191,866           186,435         0         0         3         Atlas         (blank)         191,866           125,496         1         0         3         Atlas         (blank)         95,082           125,496         1         0         3         Atlas         (blank)         95,082           205,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         150,144,256           57,747,791         3         1         12         Cloudburst         (blank)         58,48,311           46,387,548         2         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         580,795,196	7/30/2020 19:15 7/30/2020 19:15 0		0		2	6,053	2	1	12	Cloudburst	(blank)	14,769	1
169,793         1         Allas         (blank)         191,866           186,435         0         3         Atlas         (blank)         95,092           125,496         1         0         3         Atlas         (blank)         62,748           305,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         160,144,256           57,747,791         3         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         580,795,196												40,825	2
186,435         0         3         Atlas         (blank)         95,082           125,496         1         0         3         Atlas         (blank)         62,748           305,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         38,676,984           46,387,548         2         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         58,48,291,759	8/14/2020 4:30 8/14/2020 12:15 465		465		-	169,793	1	1	1	Atlas	(blank)	191,866	1
125,496         1         0         3         Atlas         (blank)         62,748           305,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         3         Atlas         (blank)         1,022,208           94,334,107         0         6         Atlas         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,48,311           46,387,548         2         1         6         Atlas         (blank)         58,48,311           46,387,548         2         1         6         Atlas         (blank)         58,48,291,759	8/28/2020 23:30 8/29/2020 1:45 135		135		0	186,435	0	0	3	Atlas	(blank)	95,082	1
305,266         2         1         6         Atlas         (blank)         384,635           25,555,200         0         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         1,022,208           57,747,791         3         1         12         Cloudburst         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,48,311           46,387,548         2         1         6         Atlas         (blank)         584,291,759	9/2/2020 4:30 9/2/2020 8:00 210		210		0	125,496	1	0	3	Atlas	(blank)	62,748	1
25,555,200         0         3         Atlas         (blank)         1,022,208           94,334,107         0         0         6         Atlas         (blank)         38,676,984           57,747,791         3         1         12         Cloudburst         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,448,311           46,387,548         2         1         6         Atlas         (blank)         580,795,196	9/3/2020 4:15 9/3/2020 13:00 525		525		1	305,266	2	1	9	Atlas	(blank)	384,635	1
25,552,000         0         3         Atlas         (blank)         1,022,208           94,334,107         0         6         Atlas         (blank)         38,676,984           57,747,791         3         1         12         Cloudburst         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,448,311           248,291,759         3         3         3         3         3         3												734,331	4
94,334,107         0         6         Atlas         (blank)         38,676,984           57,747,791         3         1         12         Cloudburst         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,448,311           248,291,759         3         3         46,291,759         46,291,759         46,291,759	7/5/2020 19:45 7/5/2020 20:45 60		09		0	25,555,200	0	0	3	Atlas	(blank)	1,022,208	1
57,747,791         3         1         12         Cloudburst         (blank)         150,144,256           46,387,548         2         1         6         Atlas         (blank)         58,448,311           248,291,759         248,291,759         580,795,196	7/23/2020 20:15 7/23/2020 23:45 210		210		0	94,334,107	0	0	9	Atlas	(blank)	38,676,984	1
46,387,548         2         1         6         Atlas         (blank)         58,448,311           248,291,759         248,291,759         560,795,196	7/30/2020 10:00 7/30/2020 23:45 825		825		3	57,747,791	3		12	Cloudburst	(blank)	150,144,256	1
	9/3/2020 5:00 9/3/2020 8:15 195		195		1	46,387,548	2	1	9	Atlas	(blank)	58,448,311	-
												248,291,759	4
												560,795,196	435





APPENDIX C

**ACRONYMS** 





ACRONYM	DEFINITION
AAOV	Average Annual Overflow Volume
ACD	Amended Consent Decree
BGI	Beargrass Interceptor
BGIR	Beargrass Interceptor Relief
BOD	Biological Oxygen Demand
CCP	Composite Correction Plan
CCWQTC	Cedar Creek Water Quality Treatment Center
CMF	Central Maintenance Facility
СМОМ	Capacity Management Operations and Maintenance
CPE	Comprehensive Performance Evaluations
CSO	Combined Sewer Overflow
CSOFT	Software Name
CSS	Combined Sewer System
DAP	Discharge Abatement Plan
DRGWQTC	Derek R. Guthrie Water Quality Treatment Center
DWO	Dry Weather Overflow
EPA	Environmental Protection Agency
FEPS	Final Effluent Pump Station
FOG	Fat Oil and Grease
FY	Fiscal Year
GLPM	Gravity Line Preventive Maintenance
HCWQTC	Hite Creek Water Quality Treatment Center
HMI	Human Machine Interface
1/1	Inflow and Infiltration
1/0	Input/ Output
ICM	Integrated Catchment Model
ID	Identification
IFIX	Software name
IOAP	Integrated Overflow Abatement Plan
ISSDP	Interim Sanitary Sewer Discharge Plan
KDEP	Kentucky Department of Environmental Protection
KPDES	Kentucky Pollutant Discharge Elimination System
LG&E	Louisville Gas & Electric Company
LTCP	Long Term Control Plan
LWC	Louisville Water Company
MCC	Motor Control Center
MF/MFWQTC	Morris Forman Water Quality Treatment Center
MFI	Middle Fork Interceptor
MG	Million Gallons
MGD	Million Gallons per Day



ACRONYM	DEFINITION
MSD	Metropolitan Sewer District (Louisville and Jefferson County)
NGPS	Nightingale Pump Station
NMC	Nine Minimum Controls
ORFM	Ohio River Force Main
ORI	Ohio River Interceptor
PLC	Programmable Logic Controller
PM	Preventive Maintenance
PS	Pump Station
RAS	Return Activated Sludge
RTC	Real Time Control
SCADA	Supervisory Control And Data Acquisition
SCAP	System Capacity Assurance Plan
SCS	Soil Conservation Service
SED2	South East Diversion 2
SOP	Standard Operating Procedure
SOR1	Southern Outfall Retention Facility 1
SORP	Sewer Overflow Response Protocol
SPS	Starkey Pump Station
SSDP	Sanitary Sewer Discharge Plan
SSES	Sewer System Evaluation Survey
SSO	Sanitary Sewer Overflow
SSOP	Sanitary Sewer Overflow Plan
SWOR1	Southwestern Outfall Retention - Phase 1
SWOR2	Southwestern Outfall Retention - Phase 2
SWPS	Southwestern Pump Station
SWSG	Southwest Sluice Gate
TRFD	Total Rainfall Depth
TSS	Total Suspended Solids
TV	Television
UM	Unplanned Maintenance
UMFPS	Upper Middle Fork Pump Station
US	United States
VFD	Variable Frequency Drive
WIN	Waterway Improvements Now
WQTC	Water Quality Treatment Center
WUS	Waters of the United States
WWTF	Wastewater Treatment Facility



APPENDIX D

SCAP BALANCE





CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	ТҮРЕ	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
Cedar Creek	11/1/2008	235533	MAINTENANCE WORK FY06 AUG-FY09 NOV - CEDAR CREEK	SCAPCREDIT		6,521
	12/31/2008	362688	MAINTENANCE WORK FY09A - CEDAR CREEK	SCAPCREDIT		5
1575	6/5/2009	236380	FAIRMOUNT ROAD MH REHAB	SCAPCREDIT	The State of the S	10,734
	6/30/2009	362689	MAINTENANCE WORK FY09B - CEDAR CREEK	SCAPCREDIT		201
	12/31/2009	SC1011254	MAINTENANCE WORK FY10A - CEDAR CREEK	SCAPCREDIT		347
	6/30/2010	SC1011255	MAINTENANCE WORK FY10B - CEDAR CREEK	SCAPCREDIT		194
	12/31/2010	SC1011259	MAINTENANCE WORK FY11A - CEDAR CREEK	SCAPCREDIT		1,720
	6/30/2011	SC1011262	MAINTENANCE WORK FY11B - CEDAR CREEK	SCAPCREDIT		934
	12/31/2011	SC1011264	MAINTENANCE WORK FY12A - CEDAR CREEK	SCAPCREDIT		269
	6/30/2012	SC1011267	MAINTENANCE WORK FY12B - CEDAR CREEK	SCAPCREDIT		814
	9/10/2012	SC1005519	CONTRACTED WORK FY12 - CEDAR CREEK	SCAPCREDIT		21,321
	9/27/2012	320989	LITTLE CEDAR CREEK I/I REHABIL	SCAPCREDIT		652,907
54	11/30/2012	263934	ST JAMES CROSSINGS	LAT EXT	9,000	-19,575
0.04	12/5/2012	196927	SONIC SPRINGS	LAT EXT	3,600	-7,830
1/2 1/3	1/29/2013	350057	FMC EAST LOUISVILLE #1673-3	LAT EXT	3,400	-7,395
	6/30/2013	SC1074160	MAINTENANCE WORK FY13 JAN-JUN - CEDAR CREEK	SCAPCREDIT		4,443
	8/19/2013	SC1005524	CONTRACTED WORK FY13 - CEDAR CREEK	SCAPCREDIT		425
	12/31/2013	14SC1000	MAINTENANCE WORK FY13A - CEDAR CREEK	SCAPCREDIT	2	2,220
		SC1082184	MAINTENANCE WORK FY14 JUL-DEC - CEDAR CREEK	SCAPCREDIT		1,482
	6/30/2014	SC1082223	MAINTENANCE WORK FY14 JAN-JUN- CEDAR CREEK	SCAPCREDIT		4,729
0- 1	12/30/2014	SC1082493	MAINTENANCE WORK FY15 JUL-DEC-CEDAR CREEK	SCAPCREDIT		4,583
	1/26/2015	239030	POPLAR LAKES PH 1	LAT EXT	18,000	-39,150
	5/26/2015	13LE1003	Bardstown Woods Sec 6	LAT EXT	5,200	-11,310
	6/30/2015	SC1082496	MAINTENANCE WORK FY15 JAN-JUN-CEDAR CREEK	SCAPCREDIT		21
	9/14/2015	LE916330	Altawood Development	LAT EXT	1,600	-3,480
	9/25/2015	SC1003694	CONTRACTED WORK FY16 - CEDAR CREEK	SCAPCREDIT		328
		SC1006188	CONTRACTED WORK FY15 - CEDAR CREEK	SCAPCREDIT		1
	12/30/2015	SC1082497	MAINTENANCE WORK FY16 JUL-DEC-CEDAR CREEK	SCAPCREDIT		16
	5/25/2016	LE915727	BARDSTOWN WOODS SEC 7	LAT EXT	4,400	-9,570
	6/30/2016	SC1082498	MAINTENANCE WORK FY16 JAN-JUN-CEDAR CREEK	SCAPCREDIT		169
	10/26/2016	SC1006171	CONTRACTED WORK FY14 - CEDAR CREEK	SCAPCREDIT		45,900
Ä.	12/30/2016	SC1082499	MAINTENANCE WORK FY17 JUL-DEC-CEDAR CREEK	SCAPCREDIT		2,396
	6/30/2017	SC1082500	MAINTENANCE WORK FY17 JAN-JUN-CEDAR CREEK	SCAPCREDIT		3,464
	7/13/2017	SC1097042	Cedar Creek I&I Rehab FY17	SCAPCREDIT		309
	8/14/2017	LE983107	Poplar Lakes Phase 3	LAT EXT	12,000	-26,100
	10/24/2017	LE971176	Cedar Ridge	LAT EXT	18,800	-40,890
	12/30/2017	SC1082501	MAINTENANCE WORK FY18 JUL-DEC-CEDAR CREEK	SCAPCREDIT		3,067
	7/23/2019	LE1048252	Landherr Estates Phase II	LAT EXT	17,600	-38,280
	9/12/2019	LE1015579	Glenmary Commons	LAT EXT	8,800	-19,140
		LE1049657	Little Spring Farm, Section 4B	LAT EXT	14,000	-30,450



CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED FLOW REDUCTION
	10/2/2019	LE978334	Houchens Industries	LAT EXT	780	-1,697
	1/30/2020	LE1049477	Hearthstone Meadows	LAT EXT	14400	-31,320
	2/27/2020	LE1085520	Jefferson Trace Blvd. Sewer Extension	LAT EXT	400	-870
	9/10/2020	LE1099947	Cedar Creek Subdivision - Section 1	LAT EXT	16000	-34,800
Cedar Creek Total						447,663
Floyds Fork	11/1/2008	235557	MAINTENANCE WORK FY06 AUG-FY09 NOV - FLOYDS FORK	SCAPCREDIT		14,540
/******* : **************************	12/31/2008	362638	MAINTENANCE WORK FY09A - FLOYDS FORK	SCAPCREDIT	SHIP SEMINAR	1
	6/30/2009	362647	MAINTENANCE WORK FY09B - FLOYDS FORK	SCAPCREDIT		4
	12/31/2009	362651	MAINTENANCE WORK FY10A - FLOYDS FORK	SCAPCREDIT		524
	1/5/2010	230379	SHAKES RUN SECTION 4	LAT EXT	3,770	-8,200
	6/30/2010	362655	MAINTENANCE WORK FY10B - FLOYDS FORK	SCAPCREDIT		82
	12/31/2010	362661	MAINTENANCE WORK FY11A - FLOYDS FORK	SCAPCREDIT		14,163
	6/30/2011	362669	MAINTENANCE WORK FY11B - FLOYDS FORK	SCAPCREDIT		22,707
	10/12/2011	309608	BLANKENBAKER TRAIL OFFICE LN-B	LAT EXT	2,880	-6,264
	10/17/2011	242480	CLAIBOURNE CROSSINGS PHASE 2	LAT EXT	0	0
	12/31/2011	359320	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		4,000
111		362674	MAINTENANCE WORK FY12A - FLOYDS FORK	SCAPCREDIT		317
	3/13/2012	319027	PREMIER SURGERY CENTER	LAT EXT	5,740	-12,485
	6/30/2012	362678	MAINTENANCE WORK FY12B - FLOYDS FORK	SCAPCREDIT		338
	10/26/2012	315945	BROOKFIELD SEC 3	LAT EXT	12,800	-27,840
	12/18/2012	361689	LAKE FOREST REHAB PH1	SCAPCREDIT		174,769
	12/31/2012	362683	MAINTENANCE WORK FY13A - FLOYDS FORK	SCAPCREDIT	Maria Na	10
	5/8/2013	331397	BROOKFIELD SEC 2A	LAT EXT	14,400	-31,320
	6/30/2013	13SC1000	FY14 STARVIEW REHABILITATION	SCAPCREDIT		14,183
		SC1082514	MAINTENANCE WORK FY13 JAN-JUN-FLOYDS FORK	SCAPCREDIT	ensilli ser da	161
	12/30/2013	SC1082517	MAINTENANCE WORK FY14 JUL-DEC-FLOYDS FORK	SCAPCREDIT		991
500	6/30/2014	SC1082518	MAINTENANCE WORK FY14 JAN-JUN-FLOYDS FORK	SCAPCREDIT		662
	12/30/2014	SC1082519	MAINTENANCE WORK FY15 JUL-DEC-FLOYDS FORK	SCAPCREDIT		1,318
	2/18/2015	13LE1062	SPEEDWAY #9451	LAT EXT	540	-1,175
	6/30/2015	SC1003809	BERRYTOWN WQTC I/I REMEDIATION FY14	SCAPCREDIT		116,834
		SC1082520	MAINTENANCE WORK FY15 JAN-JUN-FLOYDS FORK	SCAPCREDIT		661
	11/6/2015	SC1003723	MIDDLETOWN SSR P2S2 I/I REMEDIATION	SCAPCREDIT		102
	12/30/2015	SC1082521	MAINTENANCE WORK FY16 JUL-DEC-FLOYDS FORK	SCAPCREDIT		659
	1/7/2016	LE941673	Locust Creek Section 8B	LAT EXT	2,000	-4,350
	6/30/2016	SC1082523	MAINTENANCE WORK FY16 JAN-JUN-FLOYDS FORK	SCAPCREDIT		3,578
	7/7/2016	SC1003331	CONTRACTED WORK FY16 - FLOYDS FORK	SCAPCREDIT		35
1000	9/20/2016	LE932677	Shakes Run Sec 9	LAT EXT	12,000	-26,100
	12/30/2016	SC1082524	MAINTENANCE WORK FY17 JUL-DEC-FLOYDS FORK	SCAPCREDIT		1,804
Charles Control	1/4/2017	LE945783	Urton Woods, Section 2B	LAT EXT	17,200	-37,410
	1/6/2017	LE983784	Catalpa Farms Subdivision	LAT EXT	16,000	-34,800
	2/27/2017	LE971261	Notting Hills Section 4 and Clubhouse	LAT EXT	10,400	-22,620



CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	ТҮРЕ	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	6/30/2017	SC1082525	MAINTENANCE WORK FY17 JAN-JUN-FLOYDS FORK	SCAPCREDIT		1,320
	12/30/2017	SC1082526	MAINTENANCE WORK FY18 JUL-DEC-FLOYDS FORK	SCAPCREDIT		6,158
	1/7/2019	LE1039193	Glen Lakes Section 4 - Phase 3	LAT EXT	16,400	-35,670
	10/21/2019	LE1050932	Courtyard at Curry Farms Section 1	LAT EXT	17,000	-36,975
Floyds Fork Total	12.7					94,712
Hite Creek	5/15/2006	SC1006307	CONTRACTED WORK FY06 - HITE CREEK	SCAPCREDIT		656
	11/1/2008	235561	MAINTENANCE WORK FY06 AUG-FY09 NOV - HITE CREEK	SCAPCREDIT		6,404
	12/31/2008	362641	MAINTENANCE WORK FY09A - HITE CREEK	SCAPCREDIT		2
	6/1/2009	SC1006214	CONTRACTED WORK FY09 - HITE CREEK	SCAPCREDIT		328
	6/30/2009	362648	MAINTENANCE WORK FY09B - HITE CREEK	SCAPCREDIT		7
-	12/31/2009	362652	MAINTENANCE WORK FY10A - HITE CREEK	SCAPCREDIT		10
	6/30/2010	362657	MAINTENANCE WORK FY10B - HITE CREEK	SCAPCREDIT		332
	12/17/2010	320906	FLOYDSBURG ROAD I/I REHABILITA	SCAPCREDIT		28,437
	12/31/2010	362662	MAINTENANCE WORK FY11A - HITE CREEK	SCAPCREDIT		9
	6/30/2011	362670	MAINTENANCE WORK FY11B - HITE CREEK	SCAPCREDIT		9
	9/7/2011	SC1011058	Meadow Stream Pump Station & Force Main Expansion	SCAPCREDIT		2,304,000
	9/28/2011	246638	CHAPMAN COURT S/S	LAT EXT	800	-1,740
	12/31/2011	362675	MAINTENANCE WORK FY12A - HITE CREEK	SCAPCREDIT		340
	6/30/2012	362679	MAINTENANCE WORK FY12B - HITE CREEK	SCAPCREDIT		5,007
	8/31/2012	290181	CAMDEN WOOD APARTMENTS	LAT EXT	12,400	-26,970
	12/1/2012	304536	MAGNOLIA SPRINGS EAST PRIV P/S	LAT EXT	9,500	-20,663
	12/7/2012	335610	ROCK SPRINGS FARM SEC 4B	LAT EXT	6,400	-13,920
	12/31/2012	362684	MAINTENANCE WORK FY13A - HITE CREEK	SCAPCREDIT		7
	4/11/2013	SC1005530	CONTRACTED WORK FY13 - HITE CREEK	SCAPCREDIT		1,442
	6/30/2013	SC1082527	MAINTENANCE WORK FY13 JAN-JUN-HITE CREEK	SCAPCREDIT		967
	12/30/2013	SC1082528	MAINTENANCE WORK FY14 JUL-DEC-HITE CREEK	SCAPCREDIT		3,211
	6/30/2014	SC1082529	MAINTENANCE WORK FY14 JAN-JUNE-HITE CREEK	SCAPCREDIT		2,207
	12/30/2014	SC1082530	MAINTENANCE WORK FY15 JUL-DEC-HITE CREEK	SCAPCREDIT		360
	1/27/2015	SC1006178	CONTRACTED WORK FY14 - HITE CREEK	SCAPCREDIT		77,660
	3/13/2015	SC983697	MEADOWSTREAM REHABILITATION - FY13	SCAPCREDIT		448,447
	6/30/2015	SC1082531	MAINTENANCE WORK FY15 JAN-JUN-HITE CREEK	SCAPCREDIT		124
	12/30/2015	SC1082532	MAINTENANCE WORK FY16 JUL-DEC-HITE CREEK	SCAPCREDIT		1,191
	6/30/2016	SC1082533	MAINTENANCE WORK FY16 JAN-JUN-HITE CREEK	SCAPCREDIT		336
	9/13/2016	LE943178	Rock Springs Farm Section 5A	LAT EXT	6,800	-14,790
-0	10/26/2016	SC1006192	CONTRACTED WORK FY15 - HITE CREEK	SCAPCREDIT		1
	12/30/2016	SC1082534	MAINTENANCE WORK FY17 JUL-DEC-HITE CREEK	SCAPCREDIT		3,599
	3/17/2017	LE971406	Old Henry Business Park	LAT EXT	930	-2,023
	6/30/2017	SC1082535	MAINTENANCE WORK FY17 JAN-JUN-HITE CREEK	SCAPCREDIT		4,109
	12/30/2017	SC1082536	MAINTENANCE WORK FY18 JUL-DEC-HITE CREEK	SCAPCREDIT		6,823
30.0	7/16/2020	LE1104374	KEN TOWERY	LAT EXT	400	-870
Hite Creek Total			_ 1 3			2,815,049
J'Town	11/1/2008	235563	MAINTENANCE WORK FY06 AUG-FY09 NOV - JEFFERSONTOWN	SCAPCREDIT		6,203



CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	ТҮРЕ	FLOW	SUM OF APPROVED CREDIT REQUIRED FLOW REDUCTION
	12/31/2008	359323	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	8/10/2010	254871	LAKESIDE BAPT CHURCH PRIV PS	LAT EXT	2,500	-5,438
	8/11/2011	340213	JEFFERSONTOWN ENG REHAB	SCAPCREDIT		997,448
	12/31/2011	359324	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	12/31/2012	14SC1002	MAINTENANCE WORK FY13A - JEFFERSONTOWN	SCAPCREDIT		3,490
	5/28/2013	337261	SINGLE FAMILY 2909 PELHAM CT	LAT EXT	400	-870
	6/28/2013	13LE1010	SWOPE HR & TRAINING BLDG	LAT EXT	400	-870
	10/25/2013	13LE1092	BALE EQUIPMENT	LAT EXT	450	-979
	2/27/2014	13LE1098	UNIPAK	LAT EXT	720	-1,566
	12/31/2014	13LE1067	PARK COMMUNITY	LAT EXT	2200	-4,785
	2/1/2016	14LE1149	Grand Lakes Section 3	LAT EXT	5,600	-12,180
	3/10/2016	LE924049	Blankenbaker Road S/S	LAT EXT	9,010	-19,597
	5/4/2016	326360	WATTERSON TRAIL CENTER	LAT EXT	2,745	-5,970
	6/21/2016	LE930127	Vantage Point Sec 3B	LAT EXT	7,200	-15,660
	7/28/2016	13LE1158	GOODWILL INDUSTRIES OF KENTUCKY	LAT EXT	400	-870
	11/8/2016	14LE1148	Grand Lakes Section 2	LAT EXT	4,400	-9,570
	3/23/2017	LE926081	Monticello Manors Sec 2	LAT EXT	7,600	-16,530
	3/31/2017	LE967619	Louis F. Zoeller, Jr Minor Plat	LAT EXT	400	-870
'Town Total	- ISSE A-SOUR					919,386
Mill Creek	12/31/2005	359380	CALENDAR 2005 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
	12/31/2007	359381	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		24,000
	11/1/2008	235568	MAINTENANCE WORK FY06 AUG-FY09 NOV - MILL CREEK	SCAPCREDIT		51,530
	12/31/2008	359382	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		16,000
		362642	MAINTENANCE WORK FY09A - MILL CREEK	SCAPCREDIT		93
	6/30/2009	362649	MAINTENANCE WORK FY09B - MILL CREEK	SCAPCREDIT		1,507
	9/9/2009	236614	DEVEROES	LAT EXT	960	-2,088
	12/31/2009	359383	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT	674.24	32,000
		362653	MAINTENANCE WORK FY10A - MILL CREEK	SCAPCREDIT		25,272
	1/6/2010	253586	KINGSFORD RETAIL CENTER	LAT EXT	480	-1,044
	4/28/2010	238421	6840 DIXIE HWY OUTLOT	LAT EXT	2,100	-4,568
	6/30/2010	362658	MAINTENANCE WORK FY10B - MILL CREEK	SCAPCREDIT		6,216
	7/2/2010	259408	FAMILY DOLLAR 5105 DIXIE	LAT EXT	1,200	-2,610
	7/23/2010	264294	SAINT PETER THE APOSTLE CATHOL	LAT EXT	2,000	-4,350
	10/12/2010	276215	FAMILY DOLLAR - KRISTIN WAY	LAT EXT	400	-870
	12/31/2010	359325	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		359384	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
1 4		362664	MAINTENANCE WORK FY11A - MILL CREEK	SCAPCREDIT		22,745
	6/30/2011	320916	SONNE AVE PS REHABILITATION -	SCAPCREDIT		120,800
		362671	MAINTENANCE WORK FY11B - MILL CREEK	SCAPCREDIT	S NET	11,745
16	10/4/2011	299399	FAMILY DOLLAR - GREENWOOD RD	LAT EXT	800	-1,740
1	11/9/2011	309018	PRP PERFORMING ARTS ADDITION	LAT EXT	1,134	-2,466
	12/31/2011	359326	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12,000
100		359385	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
12 17 17 17 18		362676	MAINTENANCE WORK FY12A - MILL CREEK	SCAPCREDIT	13 (186)	4,800
	1/19/2012	318096	CRACKER BARREL OLD COUNTRY	LAT EXT	6,000	-13,050
	3/16/2012	SC1005678	CONTRACTED WORK FY12 - MILL CREEK	SCAPCREDIT		22
	5/21/2012	262545	DIXIE MANOR SHOPPING CENTER	LAT EXT	965	-2,099



CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	ТҮРЕ	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	6/26/2012	300374	FORT KNOX FEDERAL CREDIT UNION	LAT EXT	400	-870
	6/30/2012	361693	FY12 MILL CREEK REHAB	SCAPCREDIT		81,675
		362680	MAINTENANCE WORK FY12B - MILL CREEK	SCAPCREDIT		4,133
	7/24/2012	231800	PIONEER MOBILE HOME PARK	LAT EXT	11,200	-24,360
	9/18/2012	237457	WAVERLY HILLS	LAT EXT	400	-870
	10/19/2012	341883	NHK SPRING PRECISION	LAT EXT	17,800	-38,715
	12/5/2012	334997	BEECHLAND BAPTIST CHURCH	LAT EXT	2,715	-5,905
	12/31/2012	359327	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		148,000
		359386	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		362685	MAINTENANCE WORK FY13A - MILL CREEK	SCAPCREDIT		22,996
	1/18/2013	343763	SOUTHEAST CHRISTIAN CHURCH SW	LAT EXT	6.000	-13,050
	3/20/2013	224875	ASHBY GREEN APARTMENT HOMES	LAT EXT	36,400	-79,170
	6/6/2013	265944	RIVERPORT PHASE 4A - MICHELIN	LAT EXT	400	-870
	6/30/2013	SC1082559	MAINTENANCE WORK FY13 JAN-JUN-MILL CREEK	SCAPCREDIT	100	32.425
	9/10/2013	314887	DAYTON FREIGHT	LAT EXT	1,200	-2,610
	9/26/2013	13LE1014	LOUISVILLE FREE PUBLIC LIBRARY SOUTHWEST	LAT EXT	2400	-5,220
	10/3/2013	357140	FAMILY DOLLAR CANE RUN ROAD	LAT EXT	832	-1,810
	12/30/2013	SC1082560	MAINTENANCE WORK FY14 JUL-DEC-MILL CREEK	SCAPCREDIT	002	11,451
	1/29/2014	13LE1171	SINGLE FAMILY HOME 3700 ROMANIA DR	LAT EXT	400	-870
	6/30/2014	SC1082562	MAINTENANCE WORK FY14 JAN-JUN-MILL CREEK	SCAPCREDIT	400	7,753
	12/30/2014	SC1082563	MAINTENANCE WORK FY15 JUL-DEC-MILL CREEK	SCAPCREDIT		4,491
	3/10/2015	SC1005536	ROSA TERRACE I/I REHABILITATION FY13	SCAPCREDIT		156,635
	6/30/2015	SC1082564	MAINTENANCE WORK FY15 JAN-JUN-MILL CREEK	SCAPCREDIT		4,861
	7/31/2015	SC1003690	CONTRACTED WORK FY15 - MILL CREEK	SCAPCREDIT		58
	12/30/2015	SC1082565	MAINTENANCE WORK FY16 JUL-DEC-MILL CREEK	SCAPCREDIT		6,692
	6/30/2016	SC1082566	MAINTENANCE WORK FY16 JAN-JUN-MILL CREEK	SCAPCREDIT		3,523
	7/28/2016	LE944727	Britz Deer Hollow Lane	LAT EXT	800	-1,740
	12/30/2016	SC1082567	MAINTENANCE WORK FY17 JUL-DEC-MILL CREEK	SCAPCREDIT	000	12,857
	6/30/2017	SC1082568	MAINTENANCE WORK FY17 JAN-JUN-MILL CREEK	SCAPCREDIT		5,103
	12/30/2017	SC1082569	MAINTENANCE WORK FY18 JUL-DEC-MILL CREEK	SCAPCREDIT		
	4/10/2019	LE995375		LAT EXT	10.200	27,293
	10/31/2019	LE1039415	1105 Dorsey lane  Delcour Multi-Family Apartments	LAT EXT	10,300	-22,403 -131,370
Mill Creek	10/31/2019	LE 1039413	Decour wuru-ranniy Apartments	LATEXT	80,400	533,958
Middle Fork	12/31/2007	359328	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		20,000
madio 7 one	120112001	359400	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		84,000
	11/1/2008	235566	MAINTENANCE WORK FY06 AUG-FY09 NOV - MOIDDLE FORK	SCAPCREDIT		43,779
	12/31/2008	359329	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		SC1011287	MAINTENANCE WORK FY09A - MIDDLE FORK	SCAPCREDIT		13
λ	1/16/2009	236517	ANCHOR ESTATES MH REHAB	SCAPCREDIT		15,552
-	3/30/2009	217235	SINKING FORK ICA PHASE I REHAB	SCAPCREDIT		437,967
Fig.	5/15/2009	235376	MIDDLE FORK INT REHAB PH1	SCAPCREDIT		487,744
7	5/26/2009	179246	SHADY GLEN OF LYNDON PERSONAL	LAT EXT	(500)	1,088
	6/30/2009	SC1011288	MAINTENANCE WORK FY09B - MIDDLE FORK	SCAPCREDIT	(300)	4,208
	11/4/2009	250572	1316 WITAWANGA AVE	LAT EXT	400	-870
	12/31/2009	359331	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT	400	24,000
	(A) (1/2003	359401	CALENDAR 2009 SOMP FOMP CREDIT  CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		SC1011290	MAINTENANCE WORK FY10A - MIDDLE FORK	SCAPCREDIT		50



CREDIT BASIN	RELEASE Date	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED FLOW REDUCTION
	3/16/2010	197432	ALMOST HOME KENNELS - ALL PET	LAT EXT	3,700	-8,048
	4/15/2010	260064	OXMOOR GOLF FRONT 9	LATEXT	400	-870
- 1 - 3		260065	OXMOOR GOLF BACK 9	LAT EXT	400	-870
	4/27/2010	229834	THE BROOK HOS- DUPONT ADDITION	LAT EXT	1,763	-3,835
	6/30/2010	SC1011292	MAINTENANCE WORK FY10B - MIDDLE FORK	SCAPCREDIT		1,113
	7/2/2010	265723	Z-XPRESS CAR WASH	LAT EXT	5,449	-11,852
	7/14/2010	255792	HERR LANE APARTMENTS - 8 PLEX	LAT EXT	2,400	-5,220
		255793	HERR LANE APARTMENTS - 4 PLEX	LAT EXT	1,200	-2,610
-4-1	9/9/2010	274303	FARM CREDIT SERVICES	LAT EXT	525	-1,142
	12/15/2010	278015	METROPOLITAN UROLOGY	LAT EXT	400	-870
	12/31/2010	359333	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		359402	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT	1.215	8,000
		SC1011293	MAINTENANCE WORK FY11A - MIDDLE FORK	SCAPCREDIT		1,205
	1/20/2011	285637	SHELBYHURST OFFICE BUILDING 1	LAT EXT	6,600	-14,355
	1/27/2011	313465	DORSEY POINTE/CODOMINIUMS 8-13	LATEXT	2,400	-5,220
	4/14/2011	291263	BROWNS LANE BUILDING	LAT EXT	400	-870
	6/14/2011	293400	FOUR PLEX APARTMENTS	LAT EXT	1,200	-2,610
	6/30/2011	SC1011294	MAINTENANCE WORK FY11B - MIDDLE FORK	SCAPCREDIT		7,183
	8/11/2011	330019	FY11 ANCHOR ESTATES REHAB	SCAPCREDIT		1,359
	10/31/2011	310046	EL NAPEL - MCMAHAN CENTER	LAT EXT	3,100	-6,743
	11/29/2011	314591	CHOCOLATE MARTINI BAR/REST	LAT EXT	3,275	-7,123
	12/27/2011	320983	HURSTBOURNE I/I INVESTIGATION	SCAPCREDIT		1,408,279
	12/31/2011	359335	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		16,000
		SC1011295	MAINTENANCE WORK FY12A - MIDDLE FORK	SCAPCREDIT		919
	2/15/2012	321228	SINGLE FAMILY UNIT	LAT EXT	400	-870
	3/16/2012	SC1005671	CONTRACTED WORK FY12 - MIDDLE FORK	SCAPCREDIT		7,305
	3/27/2012	321647	SINGLE FAMILY	LAT EXT	400	-870
45570	6/22/2012	328074	SINGLE FAMILY-703 FOUNTAIN AVE	LAT EXT	400	-870
	6/30/2012	SC1011297	MAINTENANCE WORK FY12B - MIDDLE FORK	SCAPCREDIT	7 Luci	949
	8/20/2012	193195	CEDAR LAKE LODGE WASHBURN	LAT EXT	1,900	-4,133
	8/23/2012	320923	ST MATTHEWS I/I REHABILITATION	SCAPCREDIT		20,841
	9/5/2012	337796	CHAMPPS	LAT EXT	635	-1,381
	12/28/2012	347126	ADVANCE PRODUCTION SYSTEMS	LAT EXT	400	-870
	12/31/2012	14SC1003	MAINTENANCE WORK FY13A - MIDDLE FORK	SCAPCREDIT		3,309
		359336	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		92,000
	1/4/2013	339367	BAPTIST RADIATION ONCOLOGY	LAT EXT	1,500	-3,263
	1/16/2013	340778	PANDA RESTAURANT	LAT EXT	1,725	-3,752
	2/4/2013	328659	SINGLE FAMILY HOME - 6911 AMBR	LAT EXT	400	-870
	2/20/2013	352805	POOL HOUSE 9213 REIGATE COURT	LAT EXT	200	-435
	3/19/2013	14LE1001	MIRANDA LAGRANGE RD	LAT EXT	400	-870
- 44	3/20/2013	350246	SINGLE FAMILY - 218 BLISS AVE	LAT EXT	400	-870
	3/26/2013	349974	SINGLE FAMILY 205 N WATTERSON	LAT EXT	400	-870
	4/15/2013	342433	SHELBYHURST 700 OFFICE BLDG	LAT EXT	7,500	-16,313
	4/16/2013	350340	JARED THE GALLERY OF JEWELRY	LAT EXT	770	-1,675
	5/30/2013	SC1005532	CONTRACTED WORK FY13 - MIDDLE FORK	SCAPCREDIT		6,480
	6/7/2013	13LE1009	Single family 11716 Wetherby Ave	LAT EXT	400	-870
	6/30/2013	SC1082545	MAINTENANCE WORK FY13 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		6,989



CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	ТҮРЕ	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	8/28/2013	13LE1001	Single Family 835 Fountain Ave	LAT EXT	400	-870
	9/10/2013	355162	PROPOSED RESTAURANT	LAT EXT	7,540	-16,400
	9/30/2013	13LE1045	SINGLE FAMILY 8325 WHIPPS MILL RD	LAT EXT	400	-870
	10/22/2013	319292	WATERMARK ON HURSTBOURNE	LAT EXT	71,600	-155,730
	10/28/2013	331542	DENTAL/MEDICAL OFFICE BLDG	LAT EXT	400	-870
	11/5/2013	13LE1128	SINGLE FAMILY HOME 1327 ETAWAH AVE	LAT EXT	400	-870
	1	13LE1144	SINGLE FAMILY 1329 ETAWAH AVE	LAT EXT	400	-870
	11/25/2013	13LE1165	SINGLE FAMILY 8504 LORE LANE	LAT EXT	400	-870
	11/26/2013	13LE1146	CITY OF ST MATTHEWS COMMUNITY CTR PARK RESTROOM	LAT EXT	1,500	-3,263
	12/11/2013	13LE1099	NICKLIES - ST MATTHEWS	LAT EXT	1,920	-4,176
	12/18/2013	353963	DORSEY COMMONS TRACTS 1,2,3	LAT EXT	1960	-4,263
	12/30/2013	SC1082546	MAINTENANCE WORK FY14 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		91,183
	12/31/2013	352026	MCMAHAN PLAZA PHASE II BLDG B	LAT EXT	766	-1,666
	4/10/2014	13LE1117	THE VININGS	LAT EXT	850	-1,849
	6/30/2014	14LE1128	WALDORF SCHOOL OF LOUISVILLE	LAT EXT	400	-870
		SC1082547	MAINTENANCE WORK FY14 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		4,404
	12/30/2014	SC1082548	MAINTENANCE WORK FY15 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,664
	2/10/2015	SC1006201	GOOSE CREEK PLANTATION I/I REHABILITATION FY14	SCAPCREDIT		163,919
	2/11/2015	SC1006179	CONTRACTED WORK FY14 - MIDDLE FORK	SCAPCREDIT		15,043
	6/30/2015	SC1082549	MAINTENANCE WORK FY15 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		2,568
	12/30/2015	SC1082550	MAINTENANCE WORK FY16 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		15,216
	6/8/2016	LE939199	Westport Road Apartments	LAT EXT	62,800	-136,590
	6/30/2016	SC1082552	MAINTENANCE WORK FY16 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,573
	8/30/2016	LE971405	Lyndon Lane Office Condos	LAT EXT	2,652	-5,768
	10/18/2016	SC1003387	CONTRACTED WORK FY16 - MIDDLE FORK	SCAPCREDIT		91,264
	10/24/2016	SC1006194	CONTRACTED WORK FY15 - MIDDLE FORK	SCAPCREDIT		3
	12/20/2016	LE938563	The Paddock at Sawyer Park	LAT EXT	99,800	-217,065
	12/30/2016	SC1082554	MAINTENANCE WORK FY17 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT	1	2,385
	5/9/2017	LE1005641	City of Anchorage Sewer Extension	LAT EXT	800	-1,740
	6/30/2017	SC1082555	MAINTENANCE WORK FY17 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,799
	12/30/2017	SC1082557	MAINTENANCE WORK FY18 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		5,851
	2/19/2018	LE1017531	526 & 528 Fountain Ave	LAT EXT	800	-1,740
	9/7/2018	166053	616 & 618 FOUNTAIN AVE S/S	LAT EXT	1,600	-3,480
	7/26/2019	LE1020250	LFPL - Northeast Regional Library	LAT EXT	800	-1,740
		LE1024084	Morat Avenue Apartments	LAT EXT	62250	-135,394
	11/4/2019	LE1083952	1700 Cold Spring Rd & 12004 Osage Rd	LAT EXT	800	-1,740
	4/24/2020	LE1059259	904 Browns Lane	LAT EXT	1600	-3,480
	8/28/2020	LE1010450	Ormsby Lane Senior Apartments	LAT EXT	11900	-25,883
	9/11/2020	LE1098358	Golden Retriever Rescue & Adoption	LAT EXT	400	-870



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Middle Fork						2,286,387
Total						
Northern Ditch	12/31/2007	359404	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		28,000
	11/1/2008	235569	MAINTENANCE WORK FY06 AUG-FY09 NOV - NORTHERN DIT	SCAPCREDIT		11,147
	11/25/2008	236363	NORTHERN DITCH INT REHAB PH1	SCAPCREDIT		108,760
	12/31/2008	SC1011338	MAINTENANCE WORK FY09A - NORTHERN DITCH	SCAPCREDIT		11
	6/30/2009	SC1011339	MAINTENANCE WORK FY09B - NORTHERN DITCH	SCAPCREDIT		1,884
	12/31/2009	359339	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		SC1011340	MAINTENANCE WORK FY10A - NORTHERN DITCH	SCAPCREDIT		1,177
	3/5/2010	234678	THE LIGHTHOUSE PROMISE COMPLEX	LAT EXT	2,825	-6,144
	6/30/2010	SC1011343	MAINTENANCE WORK FY10B - NORTHERN DITCH	SCAPCREDIT		2,532
	12/21/2010	284728	SUBWAY - NEW CUT RD	LAT EXT	1,314	-2,858
	12/31/2010	359340	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	500	SC1011344	MAINTENANCE WORK FY11A - NORTHERN DITCH	SCAPCREDIT		2,456
	6/28/2011	320908	PARKVIEW ESTATES REHABILITATIO	SCAPCREDIT		36
	6/30/2011	SC1011345	MAINTENANCE WORK FY11B - NORTHERN DITCH	SCAPCREDIT		1,989
	11/11/2011	312810	WILLOW PLACE APT COMMUNITY CEN	LAT EXT	400	-870
	12/31/2011	359341	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		24,000
		359405	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
		SC1011346	MAINTENANCE WORK FY12A - NORTHERN DITCH	SCAPCREDIT		911
	1/26/2012	315723	JCPS EARLY CHILDHOOD DEVELOP	LAT EXT	6,000	-13,050
	3/21/2012	312057	DOLLAR GENERAL - MEDALLION CT	LAT EXT	400	-870
	6/30/2012	SC1011336	MAINTENANCE WORK FY12B - NORTHERN DITCH	SCAPCREDIT		7,893
	8/20/2012	312659	KROGER L-350 FUEL STATION	LAT EXT	400	-870
	12/31/2012	14SC1004	MAINTENANCE WORK FY13A - NORTHERN DITCH	SCAPCREDIT		4,239
		359343	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		24,000
- 30	6/30/2013	SC1082570	MAINTENANCE WORK FY13 JAN-JUN-NORTH DITCH	SCAPCREDIT		6,459
	12/5/2013	13LE1147	CARLON ROOFING	LAT EXT	992	-2,158
	12/12/2013	13LE1126	JENNINGS CROSSING TRACT 3	LAT EXT	2,100	-4,568
	12/30/2013	SC1082571	MAINTENANCE WORK FY14 JUL-DEC-NORTH DITCH	SCAPCREDIT		2,707
	6/30/2014	SC1082572	MAINTENANCE WORK FY14 JAN-JUN-NORTH DITCH	SCAPCREDIT		9,044
	10/21/2014	SC1006180	CONTRACTED WORK FY14 - NORTHERN DITCH	SCAPCREDIT		5
	12/30/2014	SC1082573	MAINTENANCE WORK FY15 JUL-DEC-NORTH DITCH	SCAPCREDIT		8,330
	6/30/2015	SC1082575	MAINTENANCE WORK FY15 JAN-JUN-NORTH DITCH	SCAPCREDIT		5,564
	12/30/2015	SC1082576	MAINTENANCE WORK FY16 JUL-DEC-NORTH DITCH	SCAPCREDIT		6,074
1	6/30/2016	SC1082577	MAINTENANCE WORK FY16 JAN-JUN-NORTH DITCH	SCAPCREDIT		5,519
	12/30/2016	SC1082578	MAINTENANCE WORK FY17 JUL-DEC-NORTH DITCH	SCAPCREDIT		9,266
	6/30/2017	SC1082579	MAINTENANCE WORK FY17 JAN-JUN-NORTH DITCH	SCAPCREDIT		6,441
341	12/30/2017	SC1082580	MAINTENANCE WORK FY18 JUL-DEC-NORTH DITCH	SCAPCREDIT		7,810



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Northern Ditch Total						274,866
ORFM	12/31/2007	359344	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	12/31/2007	359433	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		56,000
		339433	MAINTENANCE WORK FY06 AUG-FY09 NOV	SCAPCREDIT		30,000
A. =11.3	11/1/2008	235572	- ORFM	SCAPCREDIT		19,826
	12/31/2008	362643	MAINTENANCE WORK FY09A - ORFM	SCAPCREDIT		2
	6/30/2009	362650	MAINTENANCE WORK FY09B - ORFM	SCAPCREDIT	Lead of	3,835
	12/31/2009	362654	MAINTENANCE WORK FY10A - ORFM	SCAPCREDIT		7,330
	5/18/2010	263548	SINGLE FAMILY CONNECTION	LAT EXT	400	-870
	6/28/2010	213488	NORTHEAST CHRISTIAN CHURCH	LAT EXT	10,000	-21,750
	6/30/2010	362660	MAINTENANCE WORK FY10B - ORFM	SCAPCREDIT		6,773
	8/30/2010	254919	TRILOGY HEALTH SERVICES, LLC	LAT EXT	8,200	-17,835
	12/31/2010	362665	MAINTENANCE WORK FY11A - ORFM	SCAPCREDIT		181
	6/30/2011	362672	MAINTENANCE WORK FY11B - ORFM	SCAPCREDIT		4,139
	9/20/2011	280837	SPRINGHURST TOWNE CTR LOT C	LAT EXT	400	-870
	9/30/2011	320920	SHADOW WOOD I/I REHABILITATION	SCAPCREDIT		14,279
	10/14/2011	311412	SPRINGHURST CHEVROLET	LAT EXT	855	-1,860
	12/31/2011	359345	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		16,000
		359434	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		16,000
		362677	MAINTENANCE WORK FY12A - ORFM	SCAPCREDIT		7,268
	3/1/2012	320921	DERINGTON COURT I/I REHABILITA	SCAPCREDIT		56,208
	3/5/2012	187028	GLENVIEW PARK SUBD SECTION 1	LAT EXT	4,400	-9,570
		213450	GLENVIEW PARK SUB, SEC 2	LAT EXT	5,600	-12,180
	3/12/2012	322455	FIRST LADY NAILS	LAT EXT	400	-870
	6/30/2012	362681	MAINTENANCE WORK FY12B - ORFM	SCAPCREDIT	400	19.941
	GIGGIZGIZ	SC1011315	MAINTENANCE WORK FY12B - ORFM	SCAPCREDIT		19,941
	7/5/2012	292239	SPRINGHURST RESTAURANT/ RETAIL	LAT EXT	3,440	-7.482
	12/11/2012	323821	TIRE DISCOUNTERS WESTPORT RD	LATEXT	400	-870
	12/11/2012	341319	RAISING CANES RETAIL CENTER	LATEXT	1,225	-2.664
	12/10/2012	363238	FY13 PROSPECT MANHOLE REHAB	SCAPCREDIT	1,220	72,703
	12/31/2012	359346	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		24.000
	12/31/2012	362686	MAINTENANCE WORK FY13A - ORFM	SCAPCREDIT		1,161
		363235	FY13 MUDDY FORK MH REHAB	SCAPCREDIT		41,653
	2/12/2012	322458		LAT EXT	400	-870
	3/12/2013		KROGER L-707 STORE EXPANSION SINGLE FAMILY 3419 HILLVALE RD			-870
	5/13/2013	360262		LATEXT	400	-7,613
	6/21/2013	343729 SC1082581	MAINTENANCE WORK FY13 JAN-JUN-OHIO RIVER	SCAPCREDIT	3,500	279
	11/7/2013	334154	FORCE MAI GLENVIEW PARK SUBD SEC 4	LAT EXT	3,600	-7,830
	12/30/2013	SC1082582	MAINTENANCE WORK FY14 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT	-,	1,302
	12/31/2013	13LE1024	Overlook at Beech Spring Farm Sec 4	LAT EXT	5,600	-12,180
	3/11/2014	199896	SPRINGDALE OFFICE BUILDING	LATEXT	4,210	-9,157
	5/16/2014	225863	SPRING FARM LAKES SEC 1	LATEXT	4,800	-10,440
	6/30/2014	SC1082583	MAINTENANCE WORK FY14 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT	4,000	1,293
	9/22/2014	177756	SUMMIT GARDENS PHASE 1	LAT EXT	32,000	-69,600
	11/10/2014	14LE1121	Riverside Sewer Extension	LAT EXT	1,200	-2,610



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	12/30/2014	SC1082584	MAINTENANCE WORK FY15 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		4,394
	12/31/2014	SC1006181	CONTRACTED WORK FY14 - ORFM	SCAPCREDIT		1,654
	1/16/2015	13LE1071	SPRING FARM LAKE SEC 2	LAT EXT	6,000	-13,050
	2/12/2015	352634	BAUER PROPERTY	LAT EXT	2,920	-6,351
	6/30/2015	SC1082585	MAINTENANCE WORK FY15 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		2,547
	7/12/2015	SC983704	PROSPECT I&I REHABILITATION - FY13 PHASE IA	SCAPCREDIT		1,034,758
	8/5/2015	SC1003730	RIVER ROAD I/I REMEDIATION	SCAPCREDIT		120,418
	10/21/2015	LE929244	Summit Gardens Phase 2	LAT EXT	18,000	-39,150
	11/19/2015	SC1006195	CONTRACTED WORK FY15 - ORFM	SCAPCREDIT		1
	12/14/2015	LE938166	Spring Farm Lake Section 3	LAT EXT	3,200	-6,960
	12/30/2015	SC1082586	MAINTENANCE WORK FY16 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		1,478
	6/30/2016	SC1082587	MAINTENANCE WORK FY16 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		460
		SC1082589	MAINTENANCE WORK FY17 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		3,171
	8/10/2016	SC1003696	CONTRACTED WORK FY16 - ORFM	SCAPCREDIT		17,566
	10/6/2016	SC1003728	PROSPECT I&I REHABILITATION - FY16 PHASE IB	SCAPCREDIT		199,036
	11/16/2016	LE923204	Indian Springs Hotel	LAT EXT	13,000	-28,275
	6/30/2017	SC1082590	MAINTENANCE WORK FY17 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		1,630
	12/30/2017	SC1082592	MAINTENANCE WORK FY18 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		3,330
	12/6/2019	LE971285	Cityscape - Simcoe Lane	LAT EXT	66,700	-145,073
	6/16/2020	LE937450	Poplar Hill Place	LAT EXT	4000	-8,700
RFM Total						1,339,007
ond Creek	11/1/2008	235574	MAINTENANCE WORK FY06 AUG-FY09 NOV - POND CREEK	SCAPCREDIT		71,782
	12/31/2008	359347	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359438	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
	100	SC1011298	MAINTENANCE WORK FY09A - POND CREEK	SCAPCREDIT		1,913
	6/30/2009	SC1011299	MAINTENANCE WORK FY09B - POND CREEK	SCAPCREDIT		6,403
	12/31/2009	359348	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359439	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
		SC1011305	MAINTENANCE WORK FY10A - POND CREEK	SCAPCREDIT		22,337
	2/17/2010	192513	BANNON CROSSINGS SECTION 3A-1	LAT EXT	800	-1,740
	3/26/2010	219734	DSL LIFE LONG LEARNING CENTER	LAT EXT	900	-1,958
	4/27/2010	261115	EMERGENCY RESTORATION	LAT EXT	400	-870
	6/30/2010	SC1011307	MAINTENANCE WORK FY10B - POND CREEK	SCAPCREDIT		11,060
	10/13/2010	276977	DADISMAN BUILDERS-POPLAR TREE	LAT EXT	400	-870
	12/1/2010	266833	THORNTONS @ PRESTON HWY	LAT EXT	400	-870
	12/29/2010	280751	NOTTINGTON HILLS SEC 1	LAT EXT	4,400	-9,570
	12/31/2010	359350	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT	- N. 1957	12,000
		SC1011308	MAINTENANCE WORK FY11A - POND CREEK	SCAPCREDIT		19,773
	1/13/2011	187739	GLENGARRY INDUSTRIAL PARK	LATEXT	4,300	-9,353
	3/21/2011	277777	TIRE DISCOUNTERS - BOERSTE WAY	LAT EXT	2,960	-6,438
T- A-1-5-	6/30/2011	SC1011309	MAINTENANCE WORK FY11B - POND CREEK	SCAPCREDIT		10,562
	9/14/2011	304408	UPS SUPPLY CHAIN SOLUTIONS #7	LAT EXT	2,250	-4,894



CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	9/27/2011	320918	EDSEL I/I REHABILITATION - FY1	SCAPCREDIT		106,700
	11/4/2011	313444	PLANET FITNESS - JEFF BLVD	LAT EXT	1,600	-3,480
	11/29/2011	312391	LONGHORN STEAKHOUSE RESTAURANT	LAT EXT	4,840	-10,527
	12/29/2011	320919	LANTANA I/I REHABILITATION - F	SCAPCREDIT		5,000
	12/31/2011	359351	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		20,000
	and the no	SC1011310	MAINTENANCE WORK FY12A - POND CREEK	SCAPCREDIT		5,380
	2/28/2012	310845	ZAXBY'S RESTAURANT	LAT EXT	3,750	-8,156
	3/13/2012	255044	ISA-RECYCLING CENTER	LAT EXT	400	-870
	3/19/2012	312814	MILLER TRANSPORTATION	LAT EXT	1,800	-3,915
	4/16/2012	324554	NORTONS TEMPORARY OFFICE	LAT EXT	900	-1,958
	6/19/2012	234102	ETHOS AT VALLEY FARM SR LIVING	LAT EXT	7,050	-15,334
	6/21/2012	322367	SHEPHERDS CARE MEMORY HOME	LAT EXT	2,000	-4,350
	6/30/2012	SC1011313	MAINTENANCE WORK FY12B - POND CREEK	SCAPCREDIT		3,877
	8/6/2012	307332	LOUISVILLE INDUSTRIAL BLDG B	LAT EXT	2,520	-5,481
	8/10/2012	279860	BANNON CROSSINGS SEC 3B-2	LAT EXT	9,600	-20,880
		SC1005684	CONTRACTED WORK FY12 - POND CREEK	SCAPCREDIT		3,812
	8/13/2012	312053	DOLLAR GENERAL - CLEARWATER FA	LAT EXT	400	-870
	10/12/2012	343455	SINGLE FAMILY 1812 GREYLING DR	LAT EXT	400	-870
	11/9/2012	243109	OVERBROOK APARTMENTS	LAT EXT	41,200	-89,610
	12/31/2012	14SC1005	MAINTENANCE WORK FY13A - POND CREEK	SCAPCREDIT		25,984
		359354	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		56,000
	2/20/2013	329624	COPART	LAT EXT	400	-870
	5/2/2013	346082	ZAXBYS	LAT EXT	2,065	-4,491
	6/30/2013	320924	LEA ANN WAY INTERCEPTOR I&I RE	SCAPCREDIT		1,017,423
		SC1082593	MAINTENANCE WORK FY13 JAN-JUN-POND CREEK	SCAPCREDIT		41,995
	7/2/2013	335385	HARRISON LOW PRESSURE S/S	LAT EXT	1,600	-3,480
	7/12/2013	SC1005534	PICADILLY I/I REHABILITATION FY13	SCAPCREDIT		187,564
	8/16/2013	320940	4 RESIDENCE SFU 7821 MANSLICK	LAT EXT	400	-870
	8/27/2013	SC1005538	CONTRACTED WORK FY13 - POND CREEK	SCAPCREDIT		18,958
	9/6/2013	324886	PNC BANK	LAT EXT	400	-870
		361336	RENAISSANCE SOUTH BUSINESS	LAT EXT	540	-1,175
	9/26/2013	13LE1083	SINGLE FAMILY HOME 5402 (H) E MANSLICK RD	LAT EXT	400	-870
	11/12/2013	SC1005319	FEGENBUSH I/I REHABILITATION FY13	SCAPCREDIT		226,201
	12/9/2013	353125	PEGASUS TRANSPORTATION	LAT EXT	250	-544
	12/10/2013	308206	APPLEGATE FARMS	LAT EXT	57,200	-124,410
		341439	PRESTON GARDENS APTS	LAT EXT	22,200	-48,285
	12/30/2013	SC1082594	MAINTENANCE WORK FY14 JUL-DEC-POND CREEK	SCAPCREDIT		19,491
	2/14/2014	13LE1179	TIMBERBEND SUBDIVISION SEC 5B	LAT EXT	6,400	-13,920
	4/10/2014	13LE1035	RENAISSANCE SOUTH BUSINESS PARK TRACT 4	LAT EXT	5,415	-11,778
	4/24/2014	348014	ASHTON PARK TOWN HOMES	LAT EXT	9,000	-19,575
	5/16/2014	280180	LOUISVILLE INDUSTRIAL CTR F	LAT EXT	2,480	-5,394
	5/28/2014	14LE1085	Williams Properties - Self Storage Facility	LAT EXT	400	-870
	6/9/2014	13LE1034	6300 GEIL LANE WAREHOUSE	LAT EXT	720	-1,566
9	6/30/2014	SC1082595	MAINTENANCE WORK FY14 JAN-JUN-POND CREEK	SCAPCREDIT		14,457
	7/7/2014	284215	HURSTBOURNE POINTE APTS	LAT EXT	9,600	-20,880
	8/25/2014	344230	AUSTIN PARK APARTMENTS PH6	LAT EXT	27,600	-60,030



CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED FLOW REDUCTION
	11/13/2014	13LE1105	JEFFERSON COMMONS	LAT EXT	17,075	-37,138
	11/18/2014	SC1005323	FERN CREEK I/I REHABILITATION FY13	SCAPCREDIT		551,108
	12/30/2014	SC1082596	MAINTENANCE WORK FY15 JUL-DEC-POND CREEK	SCAPCREDIT		26,095
	1/13/2015	13LE1017	APEX ON PRESTON APT HOMES(Formally CITYSCAPE APTS	LAT EXT	84,400	-183,570
	3/10/2015	SC1005541	STONY BROOK I/I REHABILITATION FY13	SCAPCREDIT		345,397
	3/11/2015	SC995942	CAVEN AVE I/I REMEDIATION - FY13	SCAPCREDIT		225,645
	4/29/2015	354207	COOPER FARMS SEC 11B	LAT EXT	12,400	-26,970
		354209	COOPER FARMS SEC 11A	LAT EXT	13,200	-28,710
	6/30/2015	SC1082597	MAINTENANCE WORK FY15 JAN-JUN-POND CREEK	SCAPCREDIT		10,279
	8/25/2015	13LE1086	WOODS OF PENN RUN OFFSITE SS	LAT EXT	1,000	-2,175
	10/2/2015	13LE1140	JEFFERSON POST APARTMENTS	LAT EXT	28,800	-62,640
	12/30/2015	14LE1116	CATALPA SPRINGS	LAT EXT	2,800	-6,090
		SC1082598	MAINTENANCE WORK FY16 JUL-DEC-POND CREEK	SCAPCREDIT	13-	13,994
	12/31/2015	SC939830	Lea Ann Way West Quad 1 & 2 Rehabilitation Project	SCAPCREDIT		445,911
	2/4/2016	13LE1056	MORNING POINTE AT HURSTBOURNE	LAT EXT	13,000	-28,275
	2/12/2016	358356	WOODS OF PENN RUN Section 1	LAT EXT	18,800	-40.890
	5/17/2016	SC1003699	CONTRACTED WORK FY16 - POND CREEK	SCAPCREDIT		36,063
	6/6/2016	LE936598	Jefferson Commerce Center Tract 1A	LAT EXT	5,250	-11,419
	6/21/2016	14LE1170	Austin Park Phase 7 & 8	LAT EXT	26,400	-57,420
		LE918484	AUSTIN PARK SS PHASE 8	LAT EXT	16,800	-36,540
	6/30/2016	SC1082599	MAINTENANCE WORK FY16 JAN-JUN-POND CREEK	SCAPCREDIT		12,650
	8/5/2016	SC1003087	HILLRIDGE I/I REMEDIATION	SCAPCREDIT		308,184
	8/31/2016	SC1003292	LEA ANN WAY WEST (LAWW) QUAD 3 I/I REMEDIATION	SCAPCREDIT		311,526
	10/24/2016	SC1006197	CONTRACTED WORK FY15 - POND CREEK	SCAPCREDIT		310
	10/26/2016	SC1006182	CONTRACTED WORK FY14 - POND CREEK	SCAPCREDIT		8,390
	10/31/2016	SC1005631	LEA ANN WAY WEST (LAWW) QUAD 4 I/I REHABILITATION	SCAPCREDIT		692,905
		SC1005639	SILVER HEIGHTS SEWER REHAB	SCAPCREDIT		284,936
	12/30/2016	SC1082601	MAINTENANCE WORK FY17 JUL-DEC-POND CREEK	SCAPCREDIT		14,699
	1/17/2017	LE942402	Preston Crossing Apartments	LAT EXT	46,400	-100,920
	2/2/2017	LE954229	Jeffeerson Commerce Center Bldg.2	LAT EXT	3,150	-6,851
	6/30/2017	SC1082602	MAINTENANCE WORK FY17 JAN-JUN-POND CREEK	SCAPCREDIT	July 1	14,076
	7/6/2017	LE967615	Cooper Farms Section 12	LAT EXT	21,200	-46,110
	12/30/2017	SC1082603	MAINTENANCE WORK FY18 JUL-DEC-POND CREEK	SCAPCREDIT		10,803
	6/30/2018	SC1096902	Admiral PS I/I Rehab FY17 FY18	SCAPCREDIT		977,768
	6/10/2019	LE1047077	Orell Station 1C	LAT EXT	10,400	-22,620
	7/10/2019	LE1053368	Ferndale Place Subdivision	LAT EXT	9,600	-20,880
	1/13/2020	LE1092680	Hidden Forest Section 2	LAT EXT	10000	-21,750
ond Creek otal		26				4,959,701
SE Diversion	12/31/2007	359355	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		359440	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		128,000



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	11/1/2008	235575	MAINTENANCE WORK FY06 AUG-FY09 NOV - SE DIVERSION	SCAPCREDIT		71,472
	12/22/2008	236214	GOLDSMITH BUECHB ICA PHI REHAB	SCAPCREDIT		314,808
		236296	BEARGRASS INT REHAB PH1 SEDIV	SCAPCREDIT		122,688
	12/31/2008	359356	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT	130	4,000
		359441	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		16,000
		SC1011317	MAINTENANCE WORK FY09A - SE DIVERSION	SCAPCREDIT		1,555
	6/30/2009	SC1011318	MAINTENANCE WORK FY09B - SE DIVERSION	SCAPCREDIT	Leidon.	2,929
	10/20/2009	229854	TINY HANDS DAYCARE	LAT EXT	1,225	-2,664
-	12/31/2009	359357	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		359443	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		8,000
		SC1011322	MAINTENANCE WORK FY10A - SE DIVERSION	SCAPCREDIT	Land of	16,974
	2/11/2010	235291	SULLIVAN COLLEGE OF TECHNOLOGY	LAT EXT	900	-1,958
	3/1/2010	238328	LOUISVILLE COLLEGIATE SPORTS	LAT EXT	400	-870
	3/5/2010	241759	FRISCHS BIG BOY RESTAURANT	LAT EXT	2,400	-5,220
	4/16/2010	257275	LOUISVILLE JUNIOR ACADEMY	LAT EXT	520	-1,131
	6/30/2010	SC1011326	MAINTENANCE WORK FY10B - SE DIVERSION	SCAPCREDIT		10,739
	12/14/2010	320993	BEARGRASS CREEK PHASE II - FY1	SCAPCREDIT		10,368
	12/31/2010	359358	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT	200	4,000
		359444	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		24,000
	5.7000	SC1011328	MAINTENANCE WORK FY11A - SE DIVERSION	SCAPCREDIT		11,090
	2/16/2011	286513	GARDINER POINT RESIDENCE HALL	LAT EXT	10,800	-23,490
	5/6/2011	276378	TIRE DISCOUNTERS - BARDSTOWN	LAT EXT	1,500	-3,263
	5/30/2011	287888	BEVERAGE WAREHOUSE	LAT EXT	1,180	-2,567
	6/30/2011	SC1011330	MAINTENANCE WORK FY11B - SE DIVERSION	SCAPCREDIT		3,661
	7/1/2011	296295	KEN TOWERY -3800 S HURSTBOURNE	LAT EXT	400	-870
	12/31/2011	359359	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		64,000
		359445	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		8,000
		SC1011331	MAINTENANCE WORK FY12A - SE DIVERSION	SCAPCREDIT		5,071
	6/30/2012	SC1011316	MAINTENANCE WORK FY12B - SE DIVERSION	SCAPCREDIT		24,202
		SC1011333	MAINTENANCE WORK FY12B - SE DIVERSION	SCAPCREDIT		6,141
	8/10/2012	307018	HOOK PROPERTY FAMILY DOLLAR	LAT EXT	400	-870
	12/31/2012	14SC1006	MAINTENANCE WORK FY13A - SE DIVERSION	SCAPCREDIT		24,202
	7.5	359361	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT	7 V	68,000
	77 148	359446	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
	3/11/2013	187741	BROOKSTONE SENIOR APARTMENTS	LATEXT	16,800	-36,540
	6/14/2013	232601	RAINTREE/MARIAN CT P/S ELIM	LATEXT	105,800	-230,115
11	6/30/2013	SC1082605	MAINTENANCE WORK FY13 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		21,761
	9/18/2013	SC1005539	CONTRACTED WORK FY13 - SOUTHEAST DIVERSION	SCAPCREDIT		25,344
	11/26/2013	330437	COLLEGIATE ATHLETIC FIELD	LAT EXT	800	-1,740
	12/30/2013	SC1082606	MAINTENANCE WORK FY14 JUL-DEC- SOUTHEAST DIVERSION	SCAPCREDIT		19,491
	6/30/2014	SC1082607	MAINTENANCE WORK FY14 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		9,087
	12/30/2014	SC1082608	MAINTENANCE WORK FY15 JUL-DEC- SOUTHEAST DIVERSION	SCAPCREDIT		15,321
	2/11/2015	SC1006185	CONTRACTED WORK FY14 - SOUTHEAST DIVERSION	SCAPCREDIT		187,478



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	6/30/2015	SC1082610	MAINTENANCE WORK FY15 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		10,273
	10/20/2015	SC1006199	CONTRACTED WORK FY15 - SOUTHEAST DIVERSION	SCAPCREDIT	7 10 10	1
	12/22/2015	LE919560	Todd's Place Express Car Wash	LAT EXT	4,830	-10,505
	12/30/2015	SC1082611	MAINTENANCE WORK FY16 JUL-DEC- SOUTHEAST DIVERSION	SCAPCREDIT		7,052
	2/16/2016	SC1003718	SOUTHEAST DIVERSION AREA G (SEDG) I/I REMEDIATION	SCAPCREDIT		75,998
	5/24/2016	SC1003704	CONTRACTED WORK FY16 - SOUTHEAST DIVERSION	SCAPCREDIT		66
	6/30/2016	SC1082612	MAINTENANCE WORK FY16 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		19,904
	7/28/2016	LE943171	Costco Wholesale and Fuel Facility	LAT EXT	8,000	-17,400
	12/30/2016	SC1082613	MAINTENANCE WORK FY17 JUL-DEC- SOUTHEAST DIVERSION	SCAPCREDIT		5,812
	6/30/2017	SC1082614	MAINTENANCE WORK FY17 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		6,961
	12/30/2017	SC1082615	MAINTENANCE WORK FY18 JUL-DEC- SOUTHEAST DIVERSION	SCAPCREDIT		14,909
All III	7/29/2020	LE1074909	Bardstown Road Storage	LAT EXT	400	-870
SE Diversion Total						1,053,285
Grand Total						14,724,014



APPENDIX E

**IOAP PROJECT CROSSWALK** 





PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
17TH ST FPS DWO ELIMINATION	IOAP	MSD0306-FP	L_OR_MF_190_S_03_A_A
27TH STREET FPS DWO ELIM	IOAP	MSD0307-FP	L_OR_MF_019_S_03_A_A
34TH ST FPS DWO ELIMINATION	IOAP	MSD0308-FP	L_OR_MF_019_S_03_A_B
4TH STREET FPS DWO ELIMINATION	IOAP	MSD0303-FP	L OR MF 022 M 03 A A
ADAMS STREET SEWER SEPARATION (FORMERLY STORAGE BASIN)	IOAP	CSO172	L_OR_MF_172_S_09B_B_A_0
ANCHOR ESTATES PS ELIMINATIONS 1 - VANNAH PUMP STATION ELIMINATION	IOAP	01106	S_MI_MF_NB06_M_01_A_A-2
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION	10/4	01.00	5,11,011,012,012,012
ELIMINATION	IOAP	00056-W	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	0057-W	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	00746	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	00817	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	MSD0057-LS	S_MI_MF_NB06_M_01_A_A - 1
ASHBURTON PS IMPROVEMENTS & DIVERSION	IOAP	MSD0165-PS	S_FF_FF_NB03_M_01_C_A
ASHBURTON PS IMPROVEMENTS & DIVERSION	IOAP	MSD0166-PS	S_FF_FF_NB03_M_01_C_A
AVANTI PS ELIMINATION	IOAP	21229	S_PO_WC_PC07_M_01_A
BARDSTOWN RD PS IMPROVEMENTS	IOAP	88545	S_CC_CC_MSD1025_S_03_B
BEARGRASS INTERCEPTOR REHABILITATION PH 2	IOAP	51594	S_SD_MF_NB06_S_13_C
REECHWOOD VILLAGE SEWER REPL	ISSDP	21061	BEECHWOOD VILLAGE SEWER REP
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21089	BEECHWOOD VILLAGE SEWER REP
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21089A	BEECHWOOD VILLAGE SEWER REP
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21101	BEECHWOOD VILLAGE SEWER REP
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21153	BEECHWOOD VILLAGE SEWER REP
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21156	BEECHWOOD VILLAGE SEWER REP
BELLS LANE (FORMERLY PADDY'S RUN) WET WEATHER TREATMENT FACILITY	IOAP	CS0015	L_OR_MF_015_M_13_B_B_8
BELLS LANE (FORMERLY PADDY'S RUN) WET WEATHER TREATMENT FACILITY	IOAP	CSO191	L_OR_MF_015_M_13_B_B_8
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	08717	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	104223	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	104224	S_SF_MF_30917_M_09_A
	IOAP	104231	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	13931	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES		13931	
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	13943	S_SF_MF_30917_M_09_A S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	34093542	
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES			S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	36763	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	44396	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	44397	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	51301	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	66349	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	99259	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	KK14815019	S_SF_MF_30917_M_09_A
AMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	KK14855239	S_SF_MF_30917_M_09_A
CAVEN AVENUE PS ELIMINATION	IOAP	17724	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	27116	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	61667	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	61687	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	70212	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	MSD0133-PS	S_PO_WC_PC09_M_09B_C



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO028	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO029	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO034	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO036	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO178	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO181	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO193	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO195	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO196	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO197	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO199	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO200X	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO202	L_OR_MF_155_M_09B_B_B_4-1
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25477	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25479	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25480	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	MSD0130-PS	S_PO_WC_PC03_M_01_C
CINDERELLA PS ELIMINATION	IOAP	102339	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	35309	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	60679	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	MSD1013-PS	S_PO_WC_PC04_M_01_C
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO083	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO088	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO131	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO132	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO154	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO167	L_MU_MF_154_M_09B_B_A_8
SO058 IN-LINE STORAGE & GREEN INFRASTRUCTURE	IOAP	CSO058	L_OR_MF_058_S_08_A_A_0
SO093 STRUCTURAL MODIFICATIONS & GREEN INFRASTRUCTURE	IOAP	CSO093	L_SO_MF_093_S_08_A_A_0
SO108 DAM MODIFICATION	IOAP	CSO108	L_SO_MF_108_S_09A_B_A_4
SO140 IN-LINE STORAGE & GREEN INFRASTRUCTURE	IOAP	CSO140	L_MI_MF_140_S_08_A_A_0
SO160 SEWER SEPARATION	IOAP	CSO160	L_OR_MF_160_S_08_A_A_0
SO190 GREEN INFRASTRUCTURE (FORMERLY18TH & NORTHWESTERN PKWY TORAGE BASIN)	IOAP	CSO190	L_OR_MF_190_S_09B_B_A_8
SSO206 SEWER SEPARATION	IOAP	CSO206	L_MI_MF_206_\$_08_A_A_0
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	104289	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28249	S_JT_JT_NB02_M_01_C
	IOAP	28250	S_JT_JT_NB02_M_01_C
IELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS			
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28336	S_JT_JT_NB02_M_01_C



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28413	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28414	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28415	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28416	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28417	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28451	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28452	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28453	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28711	S_JT_JT_NB02_M_01_C
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	22307	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	22370	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	22385	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	32682	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	32688	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	59169	DEREK R GUTHRIE WQTC UPGRADES
DEREK R GUTHRIE WQTC UPGRADES	ISSDP	MSD0277	DEREK R GUTHRIE WQTC UPGRADES
DERINGTON CT PS I&I INVESTIGATION & REHABILITATION	IOAP	20154-W	S_OR_MF_NB03_S_07_C
DERINGTON CT PS I&I INVESTIGATION & REHABILITATION	IOAP	20155	S_OR_MF_NB03_S_07_C
DERINGTON CT PS I&I INVESTIGATION & REHABILITATION	IOAP	MSD0095-PS	S_OR_MF_NB03_S_07_C
EAST ROCKFORD PS RELOCATION	IOAP	04699-W	S_MC_WC_NB02_S_03_C
EDEN CARE PS SSO INVESTIGATION	IOAP	MSD1105-PS	S_FF_FF_NB02_S_13_C
EDSEL PS I&I INVESTIGATION & REHABILITATION	IOAP	92098	S_PO_WC_PC11_M_07_C
EDSEL PS I&I INVESTIGATION & REHABILITATION	IOAP	92099	S_PO_WC_PC11_M_07_C
EDSEL PS I&I INVESTIGATION & REHABILITATION	IOAP	94009	S_PO_WC_PC11_M_07_C
EDSEL PS I&I INVESTIGATION & REHABILITATION	IOAP	MSD1048-PS	S_PO_WC_PC11_M_07_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	64096	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	86052	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	92061	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	MSD0196-PS	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	MSD0263	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	MSD0263A-PS	S_JT_JT_NB01A_M_03_C
ELIMINATION OF CHENOWETH HILLS WQTC, CHENOWETH RUN PUMP STATION, AND CHIPPEWA PUMP STATION	IOAP	MSD1043-PS	S_JT_JT_NB01A_M_03_C
FAIRMOUNT RD PS IMPROVEMENTS	IOAP	116106	S_FF_CC_81316_M_03_C_A
FAIRMOUNT RD PS IMPROVEMENTS	IOAP	81316	S_FF_CC_81316_M_03_C_A
FAIRMOUNT RD PS IMPROVEMENTS	IOAP	97362	S_FF_CC_81316_M_03_C_A
FAIRMOUNT RD PS IMPROVEMENTS	IOAP	97363	S_FF_CC_81316_M_03_C_A
FAIRMOUNT RD PS IMPROVEMENTS	IOAP	97365	S_FF_CC_81316_M_03_C_A
FAIRWAY VIEW PS IMPROVEMENTS	IOAP	MSD1065-PS	S_HC_HS_NB01_S_03_C_A
FLOYDSBURG RD I&I INVEST	IOAP	108953	S_HC_HC_MSD1086_M_07_C_A
FLOYDSBURG RD I&I INVEST	IOAP	108956	S_HC_HC_MSD1086_M_07_C_A
FLOYDSBURG RD I&I INVEST	IOAP	108957	S_HC_HC_MSD1086_M_07_C_A
FLOYDSBURG RD I&I INVEST	IOAP	108958	S_HC_HC_MSD1086_M_07_C_A
FLOYDSBURG RD I&I INVEST	IOAP	90776	S_HC_HC_MSD1086_M_07_C_A
FLOYDSBURG RD I&I INVEST	IOAP	MSD1086-PS	S_HC_HC_MSD1086_M_07_C_A



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
FOX HARBOR IN-LINE STORAGE	IOAP	62769	S_HC_HN_NB03_S_09A_A_A
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	105936	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	117721	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	43472	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	46891	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	62418	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	62420	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	91629	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	91630	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	MSD0040-PS	S_MI_MF_NB04_M_03_B-1
GOOSE CREEK PS IMPROVEMENTS AND WET WEATHER STORAGE 1 - DEVONDALE WET WEATHER STORAGE	IOAP	MSD1024-PS	S_MI_MF_NB04_M_03_B-1
GOVERNMENT CENTER PS ELIMINATION	IOAP	94541	S_PO_WC_PC06_M_01_C
GOVERNMENT CENTER PS ELIMINATION	IOAP	94542	S_PO_WC_PC06_M_01_C
GOVERNMENT CENTER PS ELIMINATION	IOAP	MSD0180-PS	S_PO_WC_PC06_M_01_C
GUNPOWDER PS IN-LINE STORAGE	IOAP	MSD1055-LS	S_HC_HN_NB02_S_09A_C_B
HAZELWOOD PS I&I INVESTIGATION & REHABILITATION	IOAP	55665	S_MC_MF_55665_S_07_C
HAZELWOOD PS I&I INVESTIGATION & REHABILITATION	IOAP	55667	S_MC_MF_55665_S_07_C
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	17571	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18134	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18297	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18298	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18299	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18302	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18318-W	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18370	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18434	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18471	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18483	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18505	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	18595	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	47960A	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	48885	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	48886	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	48888	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	49224	HIKES LN INTER & HIGHGATE SP
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	49236	HIKES LN INTER & HIGHGATE SPI
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	49672	HIKES LN INTER & HIGHGATE SPI
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	49673	HIKES LN INTER & HIGHGATE SPI
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	73111	HIKES LN INTER & HIGHGATE SPI
HIKES LANE-HIGHGATE SPRINGS PS	ISSDP	MSD0012-PS	HIKES LN INTER & HIGHGATE SPI
HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	01793	S_MI_MF_NB07_S_07_C
HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	47650	S_MI_MF_NB07_S_07_C



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HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	47656	S_MI_MF_NB07_S_07_C
HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	67535	S_MI_MF_NB07_S_07_C
DLEWOOD IN-LINE STORAGE	IOAP	28984	S_CC_CC_70158_M_09A_C
DLEWOOD IN-LINE STORAGE	IOAP	28985	S_CC_CC_70158_M_09A_C
DLEWOOD IN-LINE STORAGE	IOAP	28998	S_CC_CC_70158_M_09A_C
DLEWOOD IN-LINE STORAGE	IOAP	63094	S_CC_CC_70158_M_09A_C
DLEWOOD IN-LINE STORAGE	IOAP	63095	S_CC_CC_70158_M_09A_C
DLEWOOD IN-LINE STORAGE	IOAP	70158	S_CC_CC_70158_M_09A_C
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28173	S_JT_JT_NB01_M_01_C_A
EFFERSONTOWN WQTC ELIMINATION	IOAP	28390	S_JT_JT_NB01_M_01_C_A
EFFERSONTOWN WQTC ELIMINATION	IOAP	28391	S_JT_JT_NB01_M_01_C_A
EFFERSONTOWN WQTC ELIMINATION	IOAP	28392	S_JT_JT_NB01_M_01_C_A
EFFERSONTOWN WQTC ELIMINATION	IOAP	28395	S_JT_JT_NB01_M_01_C_A
EFFERSONTOWN WQTC ELIMINATION	IOAP	28551	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	31733	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	64505	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	IS028-SI	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	MSD0255	S_JT_JT_NB01_M_01_C_A
(AVANAUGH RD PS IMPROVEMENTS	IOAP	MSD1085-PS	S_HC_HC_MSD1085_S_03_A
KLONDIKE INTERCEPTOR	IOAP	20644	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	25676	S SD MF NB04 S 01 B A
CLONDIKE INTERCEPTOR	IOAP	26650	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	26651	S SD MF NB04 S 01 B A
CLONDIKE INTERCEPTOR	IOAP	49513	S_SD_MF_NB04_S_01_B_A
CLONDIKE INTERCEPTOR	IOAP	66232	S SD MF NB04 S 01 B A
AKE FOREST PS SSO INVESTIGATION	IOAP	MSD1169-LS	S_FF_LF_NB01_S_13_C_A
ANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	25484	S_PO_WC_PC05_M_07_C
ANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	93719	S_PO_WC_PC05_M_07_C
ANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	MSD0101-PS	S_PO_WC_PC05_M_07_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	19360	S PO WC PC08 M 01 C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	19369	S PO WC PC08 M 01 C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	29933	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	29943	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	29948	S PO WC PC08 M 01 C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	29949	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	31073	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	31074	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	31083	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	31084	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	57874	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	61266	S PO WC PC08 M 01 C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	79076	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	MSD1010-PS	S_PO_WC_PC08_M_01_C
EA ANN WAY SYSTEM IMPROVEMENT	IOAP	MSD1200-PS	S PO WC PC08 M 01_C
ELAND RD SSO INVESTIGATION	IOAP	96020	S_OR_MF_NB02_S_13_C
EVEN PS ELIMINATION	IOAP	36419	S_PO_WC_PC10_M_01_C
EVEN PS ELIMINATION	IOAP	MSD1019-PS	S_PO_WC_PC10_M_01_C
ITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	67997	
ITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS		67999	S_CC_CC_67997_M_01_C
TITLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS  ITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	67999 86423	S_CC_CC_67997_M_01_C S_CC_CC_67997_M_01_C



LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	86424	0.00.00.07007.14.04.0
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS			S_CC_CC_67997_M_01_C
	IOAP	89196	S_CC_CC_67997_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	89197	S_CC_CC_67997_M_01_C
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO091	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO097	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO106	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO110	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO111	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO113	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO137	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO146	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO148	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO149	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO151	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO152	L_SO_MF_092_M_09B_B_D_8
LUCAS LN PS IN-LINE STORAGE	IOAP	MSD0199-LS	S_FF_BT_NB01_S_09A_C_A
MEADOW STREAM PS & FM UPGRADE	IOAP	91087	S_HC_HC_MSD1082_S_09A_0
MEADOW STREAM PS & FM UPGRADE	IOAP	MSD1082-PS	S_HC_HC_MSD1082_S_09A_0
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	24152-W	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	24472	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	26752	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	41374	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	41416	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0006-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0007-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0010-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0023-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0024-PS	S_OR_MF_NB01_M_01_B-1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	02932	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION  1 - BUECHEL BASIN	IOAP	02933	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	02935	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	08537	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	08935-SM	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	115183	S_MISF_MF_NB01_M_01_C_A
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION	IOAP	115184	S_MISF_MF_NB01_M_01_C_A1
1 - BUECHEL BASIN	10/4		



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	15194	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	15195	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	17618	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	23211	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	23212	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	24553	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	27005	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	27007	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	30376	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	40471	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	40559	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	43726	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	45796	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	45829	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	45835	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	45900	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47034	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47582	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47583	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47593	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47596	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47603	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	47604	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	48864	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	51160	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION I - BUECHEL BASIN	IOAP	51161	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	51180	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	51221	S_MISF_MF_NB01_M_01_C_A1



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	72288	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	72289	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	74513	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	84155	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	90700	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	96672	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	96673	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION - BUECHEL BASIN	IOAP	IS021A-SI	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 2 - PS DIVERSION AND STORAGE	IOAP	27012	S_MISF_MF_NB01_M_01_C_A1-2
MONTICELLO PS ELIMINATION	IOAP	27969	S_JT_JT_NB04_M_01_A
MONTICELLO PS ELIMINATION	IOAP	MSD0151-PS	S_JT_JT_NB04_M_01_A
MORRIS FORMAN WQTC HEADWORKS (FORMERLY ALGONQUIN PKWY STORAGE BASIN)	IOAP	CSO211	L_OR_MF_211_M_13_B_A_8_
NIGHTINGALE PS REPLACEMENT & STORAGE	IOAP	CSO018	L_SO_MF_018_S_03_A_A
NORTHERN DITCH DIVERSION INTER	ISSDP	MSD0271	NORTHERN DITCH DIVERSION INTE
PARKVIEW ESTATES I&I INVESTIGATION	IOAP	47250	S_SD_MF_NB03_S_07_C
PORTLAND CSO STORAGE BASIN	IOAP	CSO019	L_OR_MF_019_S_13_B_A_8
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	16455	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	22436	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	40870	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	40871	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	40872	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	40879	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	40880	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	42675	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	42680	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	46621	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	46623	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	46627	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	65606	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	65610	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	65623	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	65633	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	65635	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	89646	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	89791	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0123-PS	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0183-PS	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0186-PS	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0192-PS	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0193-PS	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0291	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD0292	S_OR_MF_NB04_M_03_B_B-1
ROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD1044-PS	S_OR_MF_NB04_M_03_B_B-1



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD1063-PS	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 3 - ORFM SYSTEM IMPROVEMENTS	IOAP	89641	S_OR_MF_NB04_M_03_B_B-3
PROSPECT SYSTEM IMPROVEMENTS 3 - ORFM SYSTEM IMPROVEMENTS	IOAP	89790	S_OR_MF_NB04_M_03_B_B-3
RAINTREE DRIVE AND MARIAN COURT SYSTEM IMPROVEMENTS PHASE 1 - PUMP STATION ELIMINATION	IOAP	28729-W	S_JT_JT_NB03_M_01_C-1
RAINTREE DRIVE AND MARIAN COURT SYSTEM IMPROVEMENTS PHASE 1 - PUMP STATION ELIMINATION	IOAP	MSD0149-PS	S_JT_JT_NB03_M_01_C-1
RIDING RIDGE PS IMPROVEMENTS	IOAP	MSD1060-LS	S_HC_HN_NB01_S_03_C_A
RUNNING FOX PS ELIMINATION	IOAP	MSD1080-LS	S_CC_CC_MSD1080_S_01_C
SHAWNEE FPS DWO ELIMINATION	IOAP	MSD0309-FP	L_OR_MF_189_M_03_A_A
SHIVELY INTERCEPTOR	IOAP	04498	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	04542	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	81814-W	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0016-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0043-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0044-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0047-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0049-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0050-PS	S_MC_WC_NB01_M_01_A
SINKING FORK INTERCEPTOR	IOAP	21103	SINKING FORK RELIEF SEWER
SINKING FORK INTERCEPTOR	IOAP	25012	SINKING FORK RELIEF SEWER
SINKING FORK INTERCEPTOR	IOAP	63319	SINKING FORK RELIEF SEWER
SONNE PS I&I INVESTIGATION & REHABILITATION	IOAP	MSD0042-PS	S_OR_MF_42007_S_07_C
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08426	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08427	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08430	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08431	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	18654	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30680	SOUTHEASTERN DIVERSION STRUC
	_		SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30681	
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30701	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30702	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30704	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	49647	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	63779	SOUTHEASTERN DIVERSION STRUC
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR  SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD STREET (SOR1) (FORMERLY	IOAP	72571-X CSO016	L_OR_MF_211_M_13_B_A_8_
ALGONQUIN PKWY STORAGE BASIN) SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD STREET (SOR1) (FORMERLY ALGONQUIN PKWY STORAGE BASIN)	IOAP	CSO210	L_OR_MF_211_M_13_B_A_8
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO104	L_OR_MF_105_M_13_B_A_0
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO105	L_OR_MF_105_M_13_B_A_0
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO189X	L_OR_MF_105_M_13_B_A_0
ST RENE RD PS IN-LINE STORAGE	IOAP	94187	S_FF_CH_NB01_S_09A_C_A
SUTHERLAND INTERCEPTOR	IOAP	16649	S SD MF NB05 M_01_A
	IOAP	CSO022	
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO022	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)			L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO050	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO051	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO052	L_OR_MF_155_M_09B_B_B_4



PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO054	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO055	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO056	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO150	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO155	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY I-64 & GRINSTEAD DRIVE CSO BASIN)	IOAP	CSO125	L_MI_MF_127_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY I-64 & GRINSTEAD DRIVE CSO BASIN)	IOAP	CSO126	L_MI_MF_127_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY I-64 & GRINSTEAD DRIVE CSO BASIN)	IOAP	CSO127	L_MI_MF_127_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY I-64 & GRINSTEAD DRIVE CSO BASIN)	IOAP	CSO166	L_MI_MF_127_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO082	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO084	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO118	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO119	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO120	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO121	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO141	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY LEXINGTON RD & PAYNE ST STORAGE BASIN)	IOAP	CSO153	L_SO_MF_083_M_09B_B_A_8
WATERWAY PROTECTION TUNNEL (FORMERLY STORY & MAIN ST STORAGE BASIN)	IOAP	CSO020	L_OR_MF_020_S_09B_B_A_8
WOODLAND HILLS PS DIVERSION	IOAP	33003	S_FF_FF_NB01_S_01_C_A
WOODLAND HILLS PS DIVERSION	IOAP	65516	S_FF_FF_NB01_S_01_C_A
WOODLAND HILLS PS DIVERSION	IOAP	65531	S FF FF NB01 S 01 C A







