

MAYOR LINDA GORTON



LEXINGTON

CHARLES H. MARTIN, P.E.
DIRECTOR
WATER QUALITY

January 29, 2019

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-08858

Chief
Water Programs Enforcement Branch
Environmental Protection Agency Region 4
61 Forsyth Street SW
Atlanta, Georgia 30303

RE: Civil Action No. 5:06-cv-386
Lexington-Fayette Urban County Government – Kentucky
KPDES Permit Nos.: KY0021491 / KY0021504 / KYS000002
Quarterly Report (October – December 2018)

Dear Sir / Madam:

In accordance with the provisions of Section X, Paragraph 29.A of the above referenced document, the Lexington-Fayette Urban County Government (LFUCG) submits the enclosed October – December 2018 Quarterly Report to provide an update on Consent Decree projects and activities during the past quarter.

If you should have any questions, please contact me at (859) 425-2400.

I certify under penalty of law that this document and all attachments were prepared under my 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 the 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.




Signed

1-29-19
Date

Charles H. Martin, P.E., Director
Division of Water Quality

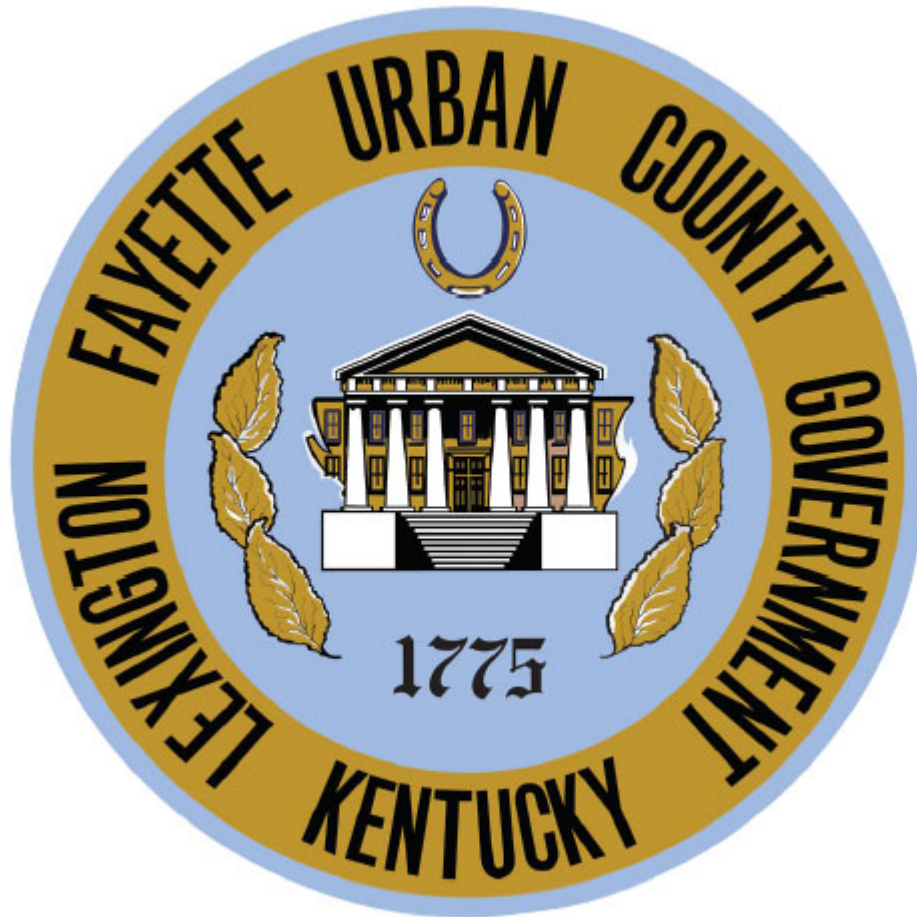
Enclosure: 2 copies to Water Programs Enforcement Branch; 1 copy to all other addresses

pc: Director of the Division of Enforcement
Department for Environmental Protection
300 Sower Boulevard
Frankfort, KY 40601

Keith Horn, LFUCG Commissioner of Law



Consent Decree Quarterly Report



October – December 2018 Quarterly Report
Fourth Quarter 2018

January 29, 2019

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Section I
CD Quarterly Report
Fourth Quarter 2018
January 29, 2019

CD Language:

X. REPORTING REQUIREMENTS AND APPROVAL OF SUBMITTALS

29. Reports.

A. Quarterly Reports.

(i) A description of all projects and activities conducted during the most recently completed calendar quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format.

LFUCG's Response:

The following two tables provide information on projects and activities conducted during the previous calendar quarter related to the sanitary sewer system. Table 1.1 highlights activities related to the Remedial Measures Plans and the Capacity, Management, Operation and Maintenance Programs; and Table 1.2 shows the schedules for the Remedial Measures Plans projects, including interim milestones and progress to date. Based on guidance provided in a letter from EPA and KDEP to LFUCG dated February 12, 2014, LFUCG may adjust the completion years for the interim milestones. If any interim milestone dates have changed since the previously submitted quarterly report, they are highlighted yellow in Table 1.2.

Following Tables 1.1 and 1.2, Lexington is providing two tables that show the Recurring SSOs from Appendix A of the Consent Decree which have now been abated or relocated. An "Abated SSO" is a Recurring SSO in a basement or from a manhole, cross connection, or pump station, as set forth in Appendix A of the Consent Decree, which has been "abated" by a repair or construction project and will not overflow during a rain event equal to or less than the design storm. A "Relocated SSO" is a Recurring SSO from a manhole, as set forth in Appendix A of the Consent Decree, which has been either removed from service or no longer overflows due to an adjacent construction project; however, this manhole's SSO has not been "abated" because the SSO was "relocated" to a new manhole or different existing manhole. The new SSO manhole to which the SSO was "relocated" will ultimately be "abated" by a future construction project. The list from Appendix A of the Consent Decree showed 111 Recurring SSO Locations. As of the fourth quarter of 2018, 49 of these locations have been abated and nine have been relocated. Table 1.3 shows the Recurring Manhole SSOs that have been abated or relocated, and Table 1.4 shows the Recurring Pump Station SSOs that have been abated.

Table 1.1
CD Quarterly Report
Fourth Quarter 2018

Consent Decree Section Number	Task	Work Completed – Fourth Quarter (October 1, 2018 – December 31, 2018)
Sanitary Sewer System and WWTP Remedial Measures Plan (RMP)		
VII(15)(G)	Group 1 – Sanitary Sewer System and WWTP RMP (EH, WH, WR)	The EPA and KDEP issued a full approval of the RMPs, including the Implementation Schedule dated February 12, 2016, on March 18, 2016.
	Group 2 – Sanitary Sewer System and WWTP RMP (TB, CR)	
	Group 3 – Sanitary Sewer System and WWTP RMP (NE, SE)	

Table 1.1
CD Quarterly Report
Fourth Quarter 2018

Consent Decree Section Number	Task	Work Completed – Fourth Quarter (October 1, 2018 – December 31, 2018)	
VII(15)(G)(viii)	Sanitary Sewer System and WWTP RMP Implementation – Project Status	Table 1.2 includes a list of the RMP projects organized by group and sewershed, shows the completion dates for the project milestones, and indicates the milestones which have been completed to date.	
		RMP Projects in design during the fourth quarter of 2018 include the following:	RMP Projects under construction during the fourth quarter of 2018 include the following:
		<ul style="list-style-type: none"> • CR-8 Sharon Village PS and FM • CR-11 Cane Run Trunk • CR-12 Lexmark Trunk A • CR-13 Lexmark Trunk B • TB-6 UK Trunk C • TB-7 UK Trunk D • TB-8 UK Trunk E • TB-11 WWTP-3 Aeration Basins • TB-11 WWTP-7 Gravity Thickeners • TB-11 WWTP-11 Secondary Digesters / Sludge Holding • WH-5 Lansdowne South Trunk • WH-21 WWTP-4 BPR Improvements • WR-2 Wolf Run Main Trunk B • WR-3 Wolf Run Main Trunk C 	<ul style="list-style-type: none"> • CR-2 Expansion Area 3 Pump Station • CR-3 Expansion Area 3 Force Main • CR-4 Expansion Area 3 Trunk • CR-5 Shandon Park Trunks • CR-6 Winburn Trunk • CR-7 Thoroughbred Acres Trunk • EH-2 East Hickman Pump Station, Phase 1 • EH-3 East Hickman Wet Weather Storage Tank • EH-11 Eliminate East Lake Pump Station • TB-10 Midland Avenue Trunk, Phase 1 (TBC) • TB-11 WWTP-10 Primary Digesters • WH-1 WH7 Wet Weather Storage Tank • WH-6 West Hickman Main Trunk D • WH-20 West Hickman WWTP Wet Weather Storage Tank • WH-21 WWTP-1 Influent Pump Station (with WH-20) • WH-21 WWTP-2 Raw Sewage Pump Station (with WH-20) • WH-21 WWTP-3 Leaping Weir (with WH-20) • WH-21 WWTP-7 Clarifier Flow Distribution • WH-21 WWTP-13 Waste Sludge Holding • WH-21 WWTP-17 Scum Facility • WH-21 WWTP-18 Non-potable Water System (with WH-20) • WH-21 WWTP-20 Odor Control Facilities, Phase 2 (with WH-20) <p>RMP Projects completed during the fourth quarter of 2018 include the following:</p> <ul style="list-style-type: none"> • TB-11 WWTP-2 Primary Clarifier Equipment

Table 1.1
CD Quarterly Report
Fourth Quarter 2018



Consent Decree Section Number	Task	Work Completed – Fourth Quarter (October 1, 2018 – December 31, 2018)
Capacity, Management, Operation and Maintenance (CMOM) Programs		
VII(16)	CMOM Programs Self-Assessment	<p>The CMOM Programs Self-Assessment, dated June 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, without further comment.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Continued implementation and tracking of CMOM Self-Assessment activities.
VII(16)(A)	Sewer Overflow Response Plan (SORP)	<p>The SORP, dated July 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, without further comment.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Submitted the 2018 updated SORP to the EPA and Kentucky EEC on October 10, 2018. ○ Continued monitoring SSO outcomes on a weekly basis, including root cause. ○ Continued recruiting new personnel to enhance ongoing SORP training program for operations staff. ○ Continued implementation and tracking of SORP activities with an emphasis on root cause analysis protocols.
VII(16)(B)	System Capacity Assurance Program (CAP)	<p>The CAP, dated March 2014, was approved by the EPA and Kentucky EEC on July 3, 2014.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Completed analysis of 2018 temporary flow and rainfall data. ○ Completed 2018 annual model recalibration / verification. Model recalibration / verification involved a re-baseline of the Town Branch and North Elkhorn Sewersheds. ○ Initiated preparation of Technical Memorandum summarizing 2018 model recalibration / verification and rainfall / flow monitoring data analysis. ○ Identified locations within sewer system for 2019 temporary rainfall and flow monitoring and issued a Request for Proposal (RFP). ○ Continued hydraulic model reviews / corrections based on completed model profile checks in the Wolf Run, Cane Run, and South Elkhorn Sewersheds. ○ Continued CAP implementation by reviewing / processing capacity requests for flow increases to the LFUCG sewer system in accordance with the CAP Plan. ○ Continued to provide modeling support during design of RMP projects and update the model for other non-RMP sewer improvements completed by LFUCG. ○ Harvested earned credits from sewer improvements completed by LFUCG in 4Q18. ○ Performed minor enhancements / maintenance of the Credit Tracking Information Management System (CTIMS) software. ○ Continued implementation and tracking of CAP activities.

Table 1.1
CD Quarterly Report
Fourth Quarter 2018

Consent Decree Section Number	Task	Work Completed – Fourth Quarter (October 1, 2018 – December 31, 2018)
VII(16)(C)	Fats, Oils, and Grease (FOG) Control Program	<p>The FOG Control Program, dated December 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, with comment.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Completed permitting for all known FSEs, continued to find and permit previously unknown and new facilities. ○ Issued 16 FOG permits and waivers (14 permits, 2 waivers). ○ Continued routine inspections of Food Service Establishments (FSEs) based on risk ranking. ○ Performed 363 FOG inspections (345 permits, 18 waivers). ○ Issued 13 Notices of Violation (NOVs). ○ Referred two FSEs to the Division of Environmental Services for enforcement action. ○ Continued work with the Lexington-Fayette County Health Department (LFCHD) to include FOG training services in LFCHD's Food Manager Certification classes. ○ LFUCG hosted the annual Gobble Grease Toss on Friday, November 23, 2018. The event encourages Lexington residents to bring leftover fats, oils, and grease from the preparation of their Thanksgiving dinners to be recycled instead of putting them down the drain and causing blockages in the sanitary sewer system. ○ Continued implementation and tracking of FOG Control Program activities.
VII(16)(D)	Gravity Line Preventative Maintenance Program (GLPMP)	<p>The GLPMP, dated December 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, with comment.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Completed Annual Inspection Program (Routine Hydraulic Cleaning) and successfully met established annual goal of 650,000 linear feet. ○ Accepted bid and awarded contract to outside vendor for the 2019 Annual Inspection Program (Routine Hydraulic Cleaning). ○ Continued implementation and tracking of GLPMP activities.
VII(16)(E)	Pump Station Operation Plan for Power Outages (PSOPPO)	<p>The PSOPPO, dated September 2012, was approved by the EPA and Kentucky EEC on October 3, 2013.</p> <ul style="list-style-type: none"> • Work completed or in progress during the fourth quarter of 2018 is as follows: <ul style="list-style-type: none"> ○ Continued implementation and tracking of PSOPPO activities.

Table 1.2
CD Quarterly Report
Fourth Quarter 2018
RMP Project Milestones



Completion deadlines are based on the approved schedule dated February 12, 2016.

 = Completed Work
 = Adjusted Interim Milestone

Group	Sewer-shed	No.	Project Name	Preliminary Design	Complete Design	Award Contract	Begin Construction	Complete Permitting	Complete Construction
Group 1	East Hickman	1	East Hickman FM ¹	2017	2023	2024	2024	2024	2025
		2	East Hickman PS, Phase 1	2016	2017	2018	2018	2018	2019
		3	East Hickman PS, Phase 2 ¹	NA	NA	NA	2025	2025	2025
		4	East Hickman WWS Tank	2016	2017	2018	2018	2018	2019
		5	Overbrook Farm FM	2021	2021	2022	2022	2022	2022
		6	Overbrook Farm PS	2020	2020	2021	2021	2021	2022
		7	Overbrook Farm Trunk	2021	2021	2022	2022	2022	2022
		8	Delong Road PS & FM	2022	2022	2023	2023	2023	2024
		9	Armstrong Mill Trunks	2023	2023	2024	2024	2024	2024
		10	Hartland 2 & 3 Trunks	2023	2023	2024	2024	2024	2024
		11	Hartland 1 Trunk	2023	2023	2024	2024	2024	2024
		12	Eliminate East Lake PS	2018	2018	2019	2019	2019	2019
		13	Century Hills Trunk Upsize	2013	2013	2014	2014	2014	2014
		14	East Lake Trunk Upsize	2013	2013	2014	2014	2014	2014
		15	Autumn Ridge Trunk Upsize	2025	2025	2026	2026	2026	2026
			Expansion Area #1 Property Acquisition	2020	2020				
	West Hickman	1	WH7 WWS Tank	2017	2017	2017	2017	2017	2018
		2	West Hickman Main Trunk A	2013	2013	2014	2014	2014	2015
		3	West Hickman Main Trunk B	2016	2016	2017	2017	2017	2017
		4	West Hickman Main Trunk C	2016	2016	2017	2017	2017	2017
		5	Lansdowne South Trunk	2018	2019	2019	2019	2019	2019
		6	West Hickman Main Trunk D	2018	2018	2019	2019	2019	2019
		7	Merrick Trunk	2023	2023	2024	2024	2024	2024
		8	Ecton Trunk	2024	2024	2025	2025	2025	2025
		9	Southeastern Hills Trunk	2020	2020	2021	2021	2021	2021
		10	West Hickman Main Trunk E	2022	2022	2023	2023	2023	2023
		11	West Hickman Main Trunk F	2023	2023	2024	2024	2024	2024
		12	Sutherland Trunk	2025	2025	2026	2026	2026	2026
		13	Idle Hour Trunk	2013	2013	2014	2014	2014	2014
		14	Centre Parkway Trunk	2025	2025	2026	2026	2026	2026
		15	The Island Trunks	2025	2025	2026	2026	2026	2026
		16	Woodhill Trunk	2013	2015	2015	2015	2015	2015
		17	Prather Road Trunk	2025	2025	2026	2026	2026	2026
		18	Richmond Road Trunk	2025	2025	2026	2026	2026	2026
		19	Wildwood Park Trunk	2021	2021	2022	2022	2022	2022
		20	WH WWTP WWS Tank	2015	2016	2016	2016	2016	2018
			WH WWTP WWS Tank, Phase 2	2021	2021	2022	2022	2022	2023
		21	West Hickman WWTP Reliability Upgrades						
		WWTP-1	Influent Pump Station	2018	2018	2018	2018	2018	2018
		WWTP-2	Raw Sewage Pump Station	2018	2018	2018	2018	2018	2018
		WWTP-3	Leaping Weir	2018	2018	2018	2018	2018	2018
		WWTP-4	BPR Improvements	2019	2020	2020	2020	2020	2020
		WWTP-5	Zone 1 Aeration	2013	2014	2014	2014	2014	2014
		WWTP-6	Zone 2 Aeration, Phase 1	2013	2014	2014	2014	2014	2014
			Zone 2 Aeration, Phase 2	2017	2017	2017	2017	2017	2017
		WWTP-7	Clarifier Flow Distribution	2019	2019	2019	2019	N/A	2019
		WWTP-8	Disinfection	2022	2022	2022	2022	2022	2022
		WWTP-9	Dechlorination	2022	2022	2022	2022	2022	2022
		WWTP-10	Final Effluent PS	2020	2021	2021	2021	2021	2021
		WWTP-11	Return Activated Sludge Pumping	2023	2023	2023	2023	2023	2023
		WWTP-12	Waste Activated Sludge Pumping	2024	2024	2024	2024	2024	2024
		WWTP-13	Waste Sludge Holding	2018	2018	2018	2018	2018	2018
		WWTP-14	Waste Sludge Thickening	2025	2025	2025	2025	2025	2025
		WWTP-15	Belt Press Replacement	2021	2021	2021	2021	2021	2021
		WWTP-16	Dewatering	2024	2024	2024	2024	2024	2024
		WWTP-17	Scum Facility	2018	2018	2018	2018	2018	2018
		WWTP-18	Non-potable Water System	2018	2018	2018	2018	2018	2018
		WWTP-19	Emergency Electrical Power	2023	2023	2023	2023	2023	2023
		WWTP-20	Odor Control Facilities, Phase 1	2013	2014	2014	2014	2014	2014
			Odor Control Facilities, Phase 2	2018	2018	2018	2018	2018	2018
		WWTP-21	Road Repair	2026	2026	2026	2026	2026	2026
	Wolf Run	1	Wolf Run Main Trunk A	2013	2014	2014	2014	2014	2015
		2	Wolf Run Main Trunk B	2017	2019	2019	2019	2019	2018
		3	Wolf Run Main Trunk C	2017	2019	2019	2019	2019	2019
		4	Wolf Run Main Trunk D	2020	2020	2021	2021	2021	2021
		5	Wolf Run Main Trunk E	2020	2020	2021	2021	2021	2021
		6	Wolf Run Main Trunk F	2021	2021	2022	2022	2022	2022
		7	Wolf Run Main Trunk G	2022	2022	2023	2023	2023	2023
		8	Wolf Run WWS Tank	2014	2015	2015	2015	2015	2016
		9	Parkers Mill Trunk	2022	2022	2023	2023	2023	2023
		10	Bob O Link Trunk	2013	2013	2014	2014	2014	2014
		11	Wolf Run Pump Station	2009	-	2012	2012	-	2014

Table 1.2
CD Quarterly Report
Fourth Quarter 2018
RMP Project Milestones

Completion deadlines are based on the approved schedule dated February 12, 2016.

 = Completed Work
 = Adjusted Interim Milestone

Group	Sewer-shed	No.	Project Name	Preliminary Design	Complete Design	Award Contract	Begin Construction	Complete Permitting	Complete Construction
Group 2	Cane Run	1	Lower Cane Run WWS Tank	2014	2015	2015	2015	2015	2017
		2	Expansion Area 3 PS	2016	2017	2017	2017	2017	2018
		3	Expansion Area 3 FM	2016	2017	2017	2017	2017	2018
		4	Expansion Area 3 Trunk	2017	2017	2018	2018	2018	2018
		5	Shandon Park Trunks	2017	2017	2018	2018	2018	2018
		6	Winburn Trunk	2017	2017	2018	2018	2018	2018
		7	Thoroughbred Acres Trunk	2017	2017	2018	2018	2018	2018
		8	Sharon Village PS and FM	2018	2019	2019	2019	2019	2020
		9	Lower Griffin Gate Trunk	2014	2016	2018	2018	2018	2018
		10	Upper Cane Run WWS Tank	2020	2020	2021	2021	2021	2021
		11	Cane Run Trunk	2018	2019	2019	2019	2019	2019
		12	Lexmark Trunk A	2019	2019	2020	2020	2020	2020
		13	Lexmark Trunk B	2019	2019	2020	2020	2020	2020
		14	New Circle Trunk A	2020	2020	2021	2021	2021	2021
		15	New Circle Trunk B	2021	2021	2022	2022	2022	2022
		16	Griffin Gate Rehab	2019	2019	2020	2020	2020	2020
	Town Branch	1	Town Branch WWTP WWS Tank	2013	2014	2014	2014	2015	2016
			Town Branch WWTP WWS Tank, Phase 2	2023	2023	2024	2024	2024	2025
		2	Town Branch PS Replacement	2018	2019	2019	2019	2019	2019
		3	Tie-in Lower Cane Run FM	2014	2014	2014	2015	2015	2016
		4	UK Trunk A	2016	2016	2016	2016	2016	2017
		5	UK Trunk B (Newtown Pike Extension)	-	-	-	2014	-	2016
		6	UK Trunk C	2018	2019	2019	2019	2019	2019
		7	UK Trunk D	2019	2019	2020	2020	2020	2020
		8	UK Trunk E	2019	2019	2020	2020	2020	2020
		9	Georgetown Road Trunk	2024	2024	2025	2025	2025	2025
		10	Midland Avenue Trunk, Phase 1 (TBC)	2017	2018	2018	2019	2019	2023
			Midland Avenue Trunk, Phase 2	2022	2022	2023	2023	2023	2023
		11	Town Branch WWTP Reliability Upgrades						
		WWTP-1	Headworks	2015	2016	2016	2016	2016	2016
		WWTP-2	Primary Clarifier Equipment	2018	2018	2018	2018	2018	2018
		WWTP-3	Aeration Basins	2020	2021	2021	2021	2021	2021
		WWTP-4	Final Clarifier Equipment, Phase 1	2014	2014	2014	2014	2014	2014
			Final Clarifier Equipment, Phase 2	2024	2025	2025	2025	2025	2025
		WWTP-5	RAS Pump Station	2022	2022	2022	2022	2022	2022
		WWTP-6	WAS Pump Station	2026	2026	2026	2026	2026	2026
		WWTP-7	Gravity Thickeners	2018	2019	2019	2019	2019	2019
		WWTP-8	Disinfection	2024	2024	2024	2024	2024	2024
		WWTP-9	Non-potable Water PS	2024	2024	2024	2024	2024	2024
		WWTP-10	Primary Digesters	2016	2017	2018	2018	2018	2018
		WWTP-11	Secondary Digesters / Sludge Holding	2019	2020	2020	2020	2020	2020
		WWTP-12	Dewatering	2018	2019	2019	2019	2019	2019
		WWTP-13	Scum Facility	2021	2021	2021	2021	2021	2021
		WWTP-14	Site	2023	2024	2024	2024	2024	2026
Group 3	North Elkhorn	1	North Elkhorn PS WWS Tank	2025	2025	2026	2026	2026	2026
		2	Eastland Trunk	2022	2022	2023	2023	2023	2023
		3	Liberty Road Trunk	2020	2020	2021	2021	2021	2021
		4	Greenbrier #2 PS	2024	2024	2025	2025	2025	2025
		5	Greenbrier Trunk	2024	2024	2025	2025	2025	2025
		6	Floyd Drive Rehab	2023	2023	2024	2024	2024	2024
		7	Expansion Area 2A Projects	-	-	2012	2012	-	2014
	South Elkhorn	1	South Elkhorn PS Upsize	2016	2017	2017	2017	2017	2017
		2	Mint Lane Trunk	2024	2024	2025	2025	2025	2025
		3	Mint Lane PS	2024	2024	2025	2025	2025	2025

Notes: If a date was not provided for a milestone, then the milestone was completed prior to the creation of this table.

¹The completion dates for these projects were revised per the EPA- and KDEP-approved modification request dated March 13, 2017.

Table 1.3
CD Quarterly Report
Fourth Quarter 2018
Recurring SSOs Abated / Relocated

Date Abated or Relocated	CD SSO #	SSO Manhole ID #	Address of Recurring SSO	Sewershed	Abated or Relocated	Reason for SSO Abatement / Relocation	New SSO Manhole ID #	Final RMP Project to Enable Abatement
3rd Quarter 2013 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
8/13/2013	25	TB5 43	410 Rose Lane	Town Branch	Abated	Cross Connection Has Been Removed	N/A	N/A
8/13/2013	26	TB5 46A	457 Woodland	Town Branch	Abated	Cross Connection Has Been Removed	N/A	N/A
8/13/2013	27	TB5 326	146 McDowell Road	Town Branch	Abated	Cross Connection Has Been Removed	N/A	N/A
8/13/2013	28	TB5 344	1004 Slashes Road	Town Branch	Abated	Cross Connection Has Been Removed	N/A	N/A
8/13/2013	49	WH4 54	Zandale Drive	West Hickman	Abated	Zandale Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	50	WH4 32	Zandale Drive	West Hickman	Abated	Zandale Trunk Project / 1 Overflow Reported in 2Q10	N/A	N/A
8/13/2013	51	WH4 65B	Zandale Drive	West Hickman	Abated	Zandale Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	58	WH3 500	Centre Pkwy	West Hickman	Abated	PM Issue / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	73	NE1 90	Hisle Way	North Elkhorn	Abated	Dixie Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	74	NE1 199	Dartmoor Drive	North Elkhorn	Abated	Rehab Project on Dartmoor / Last Reported Overflow 2Q10	N/A	N/A
8/13/2013	75	NE1 84	Chatsworth Drive	North Elkhorn	Abated	Dixie Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	76	NE1 83	Chatsworth Drive	North Elkhorn	Abated	Dixie Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	77	NE1 25	Gayle Drive	North Elkhorn	Abated	Dixie Trunk Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	78	CR6 130A	Seventh & Jackson	Cane Run	Abated	Collection System Rehab / 0 Overflows in 11 yrs	N/A	N/A
8/13/2013	79	CR6 132A	Shelby Street	Cane Run	Abated	Manhole Removed From System	N/A	N/A
8/13/2013	80	CR5 201	Edgelawn Avenue	Cane Run	Abated	2001 Sewer Project / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	81	CR4 175	Pierson Drive	Cane Run	Abated	On PM list / Last Reported Overflow 2Q10	N/A	N/A
8/13/2013	83	CR2 161	Pennabaker Drive	Cane Run	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	94	WH10 400	Nicholasville Road	West Hickman	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	96	WR3 103A	Poppy Road	Wolf Run	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	97	NE2 154	Jingle Bell (1454)	North Elkhorn	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	100	TB3 486	Nelson Avenue	Town Branch	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	101	TB5 15	Park Avenue	Town Branch	Abated	Non-Recurring SSO / 1 Reported Overflow 2Q08	N/A	N/A
8/13/2013	102	CR7 134	Stanton Way (1950)	Cane Run	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	103	CR7 125	Newtown Pike	Cane Run	Abated	On PM list / 0 Overflows Reported in 11 yrs	N/A	N/A
8/13/2013	104	CR5 25	Deepwood Drive	Cane Run	Abated	On PM list / Last Reported Overflow 2Q10	N/A	N/A
8/13/2013	105	CR3 18C	Loudon Avenue (115)	Cane Run	Abated	On PM List / 1 Reported Overflow 4Q12	N/A	N/A
8/13/2013	110	TB5 17	443 Oldham Avenue	Town Branch	Abated	Identified as Relief Sewer to Euclid Avenue	N/A	N/A
8/13/2013	111	TB2 33	648 S Broadway	Town Branch	Abated	Cross Connection Has Been Removed	N/A	N/A
4th Quarter 2013 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
1st Quarter 2014 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
2nd Quarter 2014 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
3rd Quarter 2014 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
8/15/2014	108	CR3 51	772 N Broadway	Cane Run	Abated	Plugged 1/30/2014	N/A	N/A
9/30/2014	109	TB5 14	441 Park Avenue	Town Branch	Abated	Determined To Not Be a Cross Connection	N/A	N/A
4th Quarter 2014 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
1st Quarter 2015 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								

Table 1.3
CD Quarterly Report
Fourth Quarter 2018
Recurring SSOs Abated / Relocated

Date Abated or Relocated	CD SSO #	SSO Manhole ID #	Address of Recurring SSO	Sewershed	Abated or Relocated	Reason for SSO Abatement / Relocation	New SSO Manhole ID #	Final RMP Project to Enable Abatement
2nd Quarter 2015 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
11/6/2014	106	EH3_90	1165 Mt Rushmore Way	East Hickman	Relocated	Century Hills Trunk Project (EH-12)	EH3-1030	EH WWS Tank (EH-3)
11/10/2014	62	WR4_10	586 Bob-O-Link Road	Wolf Run	Abated	Bob-O-Link Trunk Project (WR-10)	N/A	N/A
11/10/2014	63	WR4_9	586 Bob-O-Link Road	Wolf Run	Abated	Bob-O-Link Trunk Project (WR-10)	N/A	N/A
11/10/2014	64	WR4_25	380 Bob-O-Link Road	Wolf Run	Abated	Bob-O-Link Trunk Project (WR-10)	N/A	N/A
3rd Quarter 2015 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
4th Quarter 2015 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
12/19/2014	10	WH7_280	204 St Ann Drive	West Hickman	Relocated	Idle Hour Trunk Project (WH-13)	WH7_931	WH7 WWS Tank (WH-1)
12/19/2014	11	WH7_294	209 St Ann Drive	West Hickman	Relocated	Idle Hour Trunk Project (WH-13)	WH7_941	WH7 WWS Tank (WH-1)
12/19/2014	12	WH7_295A	209 St Ann Drive	West Hickman	Relocated	Idle Hour Trunk Project (WH-13)	WH7_958	WH7 WWS Tank (WH-1)
9/30/2015	5	WH7_97E	2401 Richmond Road	West Hickman	Abated	Woodhill Trunk Project (WH-16)	N/A	N/A
12/19/2015	3	WH7_98	2399 Richmond Road	West Hickman	Relocated	Woodhill Trunk Project (WH-16)	WH7_982	WH7 WWS Tank (WH-1)
12/19/2015	4	WH7_97G	2399 Richmond Road	West Hickman	Relocated	Woodhill Trunk Project (WH-16)	WH7_982	WH7 WWS Tank (WH-1)
12/19/2015	6	WH7_103	2350 Woodhill Shopping	West Hickman	Relocated	Woodhill Trunk Project (WH-16)	WH7_991	WH7 WWS Tank (WH-1)
12/19/2015	7	WH7_35A	2300 Richmond Road	West Hickman	Relocated	Woodhill Trunk Project (WH-16)	WH7_982	WH7 WWS Tank (WH-1)
12/19/2015	8	WH7_36	2300 Richmond Road	West Hickman	Relocated	Woodhill Trunk Project (WH-16)	WH7_982	WH7 WWS Tank (WH-1)
1st Quarter 2016 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
3/31/2016	30	Basement	245 Radcliffe Road	Cane Run	Abated	Backtrap Valve Installed in 2000	N/A	N/A
3/31/2016	31	Basement	209 Radcliffe Road	Cane Run	Abated	Former Maintenance Issue	N/A	N/A
3/31/2016	32	Basement	236 Chenault Road	Town Branch	Abated	Backtrap Valve Installed in 2003 to Address Surface Water Flooding	N/A	N/A
2nd Quarter 2016 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
3rd Quarter 2016 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
4th Quarter 2016 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
1st Quarter 2017 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
2nd Quarter 2017 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
6/30/2017	99	TB1_155	Manchester Avenue	Town Branch	Abated	UK Trunk A Project (TB-4)	N/A	N/A
3rd Quarter 2017 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
4th Quarter 2017 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
1st Quarter 2018 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
2nd Quarter 2018 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
3rd Quarter 2018 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								
4th Quarter 2018 Basement, Manhole, or Cross Connection Recurring SSOs Abated / Relocated								
no changes								

Table 1.4
CD Quarterly Report
Fourth Quarter 2018
Recurring Pump Station SSOs Abated

Date Abated	CD SSO #	Pump Station Name	Pump Station Address	Sewershed	Reason for Recurring SSO Abatement
3rd Quarter 2013 Pump Station Recurring SSO Abatement					
8/13/2013	1	South Elkhorn	2500 Bowman Mill Road	South Elkhorn	Capital Project Constructed New Pump Station
8/13/2013	2	North Elkhorn	2201 Elkhorn Road	North Elkhorn	Capital Project Constructed New Pump Station
8/13/2013	16	Deep Springs	469 Anniston Drive	North Elkhorn	Capital Project Constructed New Pump Station
8/13/2013	17	Dixie	1459 Huntsville Drive	North Elkhorn	Capital Project Constructed New Pump Station
8/13/2013	92	Bluegrass Field	1031 Air Freight Drive	South Elkhorn	Capital Project Constructed New Pump Station
4th Quarter 2013 Pump Station Recurring SSO Abatement					
no changes					
1st Quarter 2014 Pump Station Recurring SSO Abatement					
no changes					
2nd Quarter 2014 Pump Station Recurring SSO Abatement					
no changes					
3rd Quarter 2014 Pump Station Recurring SSO Abatement					
8/15/2014	88	Greenbrier #1	3770 Katkay Drive	North Elkhorn	Decommissioned
4th Quarter 2014 Pump Station Recurring SSO Abatement					
10/3/2014	18	Wolf Run	755 Enterprise Dr	Wolf Run	Capital Project Constructed New Pump Station
10/3/2014	24	Man-O-War	2079 Bryant Rd	North Elkhorn	Decommissioned
10/3/2014	91	Hamburg Farm	1936 Pavillion Way	North Elkhorn	Rehabilitated
1st Quarter 2015 Pump Station Recurring SSO Abatement					
no changes					
2nd Quarter 2015 Pump Station Recurring SSO Abatement					
no changes					
3rd Quarter 2015 Pump Station Recurring SSO Abatement					
no changes					
4th Quarter 2015 Pump Station Recurring SSO Abatement					
no changes					
1st Quarter 2016 Pump Station Recurring SSO Abatement					
no changes					
2nd Quarter 2016 Pump Station Recurring SSO Abatement					
no changes					

Table 1.4
CD Quarterly Report
Fourth Quarter 2018
Recurring Pump Station SSOs Abated

Date Abated	CD SSO #	Pump Station Name	Pump Station Address	Sewershed	Reason for Recurring SSO Abatement
3rd Quarter 2016 Pump Station Recurring SSO Abatement					
no changes					
4th Quarter 2016 Pump Station Recurring SSO Abatement					
no changes					
1st Quarter 2017 Pump Station Recurring SSO Abatement					
no changes					
2nd Quarter 2017 Pump Station Recurring SSO Abatement					
no changes					
3rd Quarter 2017 Pump Station Recurring SSO Abatement					
no changes					
4th Quarter 2017 Pump Station Recurring SSO Abatement					
2/20/2017	84	Lower Cane Run	Coldstream Station	Cane Run	Lower Cane Run WWS Tank (CR-1)
1st Quarter 2018 Pump Station Recurring SSO Abatement					
no changes					
2nd Quarter 2018 Pump Station Recurring SSO Abatement					
no changes					
3rd Quarter 2018 Pump Station Recurring SSO Abatement					
no changes					
4th Quarter 2018 Pump Station Recurring SSO Abatement					
no changes					

The following two tables provide information on projects and activities conducted during the last calendar quarter related to the storm sewer system. Table 1.5 highlights various Stormwater Quality Management Program (SWQMP) activities and Table 1.6 shows the Performance Standards with deadlines during the previous quarter.

Table 1.5
CD Quarterly Report
Fourth Quarter 2018
Stormwater Quality Management Program

1.	Performance Standards – see Table 1.6 highlighting the status of the Performance Standards with monthly and twice annually deadlines.
2.	Stormwater Quality Management Program – LFUCG continued implementing its <u>Stormwater Quality Management Program</u> , dated June 1, 2016.
3.	Water Quality Management Fee Implementation – Ongoing Stormwater Quality Projects Incentive Grant Program grants continued as scheduled and some were completed. Grant award agreements executed during the fourth quarter were forwarded to the Urban County Council (UCC) for approval. The Water Quality Fees Board met on October 11, 2018, to select the FY 2019 Class B Infrastructure grant recipients.
4.	<p>Public Education and Outreach –</p> <ul style="list-style-type: none"> • Department of Environmental Quality and Public Works (EQPW) staff hosted a display about streams, greenways, and riparian buffers at the Paint By Nature reception at the Downtown Arts Center on October 21. EQPW also hosted a display about stormwater and pollution at Pumpkinmania at Transylvania University on October 30. • The database of people wanting to receive information from LFUCG's Division of Water Quality continued to be updated. • The website continued to be updated. • E-newsletters were released on November 16 and December 31. • EQPW staff gave a presentation about stormwater and Lexington's MS4 Permit during a teacher training event hosted by Bluegrass Greensource on October 20. EQPW staff attended a meeting of the Village at Rabbit Run Condo Association on December 6 to discuss stormwater. • Lexington issued a press release on October 8 about the two National Municipal Stormwater and Green Infrastructure Awards won by the Division of Water Quality.

5.	<p>Public Involvement and Participation –</p> <ul style="list-style-type: none"> • DWQ staff conducted annual training for the LexCall staff on October 30. • EQPW staff participated in the Kentucky Watershed Forum on October 26. The fifth West Hickman Watershed Council meeting, co-hosted by LFUCG, was held on November 7. • Lexington held a Household Hazardous Waste Collection Event on October 20 and the Gobble Grease Toss on November 23. • Storm drain stenciling continued. • The Stormwater Stakeholder Advisory Committee met on December 7.
6.	<p>Illicit Discharge Detection and Elimination – During the fourth quarter of 2018, 14 IDDE investigations were completed and 12 investigations were initiated or are ongoing and in monitoring status. Of the 26 investigations, five were responses to reported spills. No NOV's were issued during the fourth quarter. LFUCG sent 53 letters during the quarter to property owners and IDDE responsible parties regarding stormwater pollution education with pertinent ordinance and cleanup information. Annual staff training on the IDDE program was held on December 6.</p>
7.	<p>Construction Site Stormwater Runoff Control – Monthly inspections of active construction sites and twice-monthly inspections of targeted construction sites continued. Staff and consultant training on the ESC program took place in October. The annual workshop with the Engineering, Development, and Construction Industry was held on November 30.</p>
8.	<p>Post-Construction Stormwater Management in New Development and Redevelopment – Inspections of detention basins, retention ponds, stormwater control devices, and critical culverts continued. Eleven water quality BMPs at seven sites were added to the inventory during the fourth quarter. The annual workshop with the Engineering, Development, and Construction Industry was held on November 30.</p>
9.	<p>Pollution Prevention for Municipal Operations – City-owned stormwater quality control BMPs were inspected and maintained, as needed. LFUCG continued a quarterly highlight of a Greenworks Guide on its intranet during the fourth quarter. Annual wet weather sampling at Municipal Waste Facilities was completed during the fourth quarter.</p> <p>Contractors removed more than 42 tons of trash and litter from streams, drainageways, and public rights-of-way at 79 locations during the fourth quarter. Any woody debris that was removed by contractors was taken to the city's yard waste composting facility.</p>

10.	Industrial Facility Stormwater Pollution Prevention – Sixteen industrial facilities and three high-risk commercial facilities were inspected during the fourth quarter. Representative Industrial Outfall Monitoring began during the fourth quarter. Annual staff training on the IN program was held on December 6.
11.	Water Quality Monitoring – Monitoring this quarter included quarterly dry and wet weather stream sampling, and every-other-year fish surveys. The Watershed-Focused Monitoring Program's Phase 1 Screening of the West Hickman Watershed began in October. Annual staff training on the MON program was held on December 6.
12.	Reporting and Recordkeeping – Ongoing recordkeeping continued.
13.	TMDLs and Impaired Waters – Work continued to develop a list of appropriate BMPs for potential implementation. The second event for sampling impaired waters took place during the fourth quarter.

Table 1.6
CD Quarterly Report
Fourth Quarter 2018
Status of Consent Decree MS4 Performance Standards as of 12/31/18

MS4 Performance Standard		Completion Schedule	Status	Comparison of Actual Performance to Performance Standard
CS-6	Commencing with the first full calendar month after entry of the Consent Decree, conduct monthly inspections of at least 90% of active construction sites with reasonable potential to discharge to the MS4.	First Full Calendar Month After CD Effective Date	Completed, but will reoccur monthly.	LFUCG met the 90% requirement each month of the fourth quarter of 2018 (99.2% for October, 98.8% for November, and 99.6% for December).
PPRC-14	Commencing with the first full calendar month after entry of the Consent Decree, ensure the inspection of at least 90% of the publicly- and privately-owned detention basins with reasonable potential to discharge pollutants to the MS4 at least two times a year.	First Full Calendar Month After CD Effective Date	Completed, but occurs twice annually.	LFUCG met the 90% requirement for the second round of inspections in 2018. As of November 20, 2018, the second round was completed with 1,207 out of 1,207 detention basins having been inspected. Three detention basins were added to the inventory and one detention basin was moved to the retention pond inventory, for a current total inventory of 1,207.
PPRC-15	Commencing with the first full calendar month after entry of the Consent Decree, ensure the inspection of at least 90% of the publicly- and privately-owned retention ponds with reasonable potential to discharge pollutants to the MS4 at least once a month.	First Full Calendar Month After CD Effective Date	Completed, but will reoccur monthly.	LFUCG met the 90% requirement each month of the fourth quarter of 2018 (100% for all three months). As of December 31, 2018, there are 104 retention ponds on the inventory.
PPRC-16	Commencing with the first full calendar month after entry of the Consent Decree, ensure the inspection of at least 90% of the culverts in Appendix LL of the SWQMP for clogging and excessive buildup of sediment at least once a month and within three days of a rainfall of 1 inch or more in a calendar day.	First Full Calendar Month After CD Effective Date	Completed, but will reoccur monthly.	LFUCG met the 90% requirement for the monthly inspections for the fourth quarter of 2018 (100% for all three months). Additionally, there were seven rain events during this quarter with greater than 1" of rainfall in a calendar day (10/4, 10/31, 11/6, 12/1, 12/15, 12/20, and 12/31). LFUCG completed a round of inspections within three working days of each event and achieved >90% of the inspections for these events (100% for all events). The critical culvert inventory has 46 locations as of December 31, 2018.

Table 1.7 provides information on progress completed during the last calendar quarter related to the implementation of the Supplemental and Commonwealth Environmental Projects required by the Consent Decree.

Table 1.7
CD Quarterly Report
Fourth Quarter 2018
Supplemental and Commonwealth Environmental Projects

J-1	Coldstream Park Stream Corridor Restoration and Preservation SEP – The SEP Completion Report was submitted on December 10, 2018, and the FEMA Letter of Map Revision was submitted on December 26, 2018.
J-2	Green Infrastructure SEP – Complete.
K-1	Blue Sky Package Treatment Plant Elimination Project – Complete.
K-2	<p>Flooding Evaluation Project –</p> <p>Completed construction of the Wilson Downing Tributary project.</p> <p>Bids on the construction contract for the Wabash, Goodrich, Pensacola, Lackawanna (WGPL) area of the Southland stormwater project were opened on December 12.</p> <p>Peachtree (#71.5) and Woodhill (#72) will be addressed by design of a diversion storm sewer to eliminate street flooding, and fee negotiations with a design consultant were completed during the fourth quarter.</p> <p>Continued investigation and analysis of intersection flooding at Elizabeth Street and Forest Park for the Elizabeth St. (#60) project.</p> <p>Questionnaires were sent to residents in the Rosemary / Bermuda (#76) project area.</p> <p>Questionnaires were sent to residents in the Joyland (#78) project area.</p>

Section II
CD Quarterly Report
Fourth Quarter 2018
January 29, 2019

CD Language:

X. REPORTING REQUIREMENTS AND APPROVAL OF SUBMITTALS

29. Reports.

A. Quarterly Reports.

(ii) The date, locations, estimated volume, and cause (if known) of all SSOs for the most recently completed quarter; a cumulative accounting of the estimated reduction in volume and in number of occurrences of SSOs and Unpermitted Bypasses.

LFUCG's Response:

The attached tables provide information related to SSOs and Unpermitted Bypasses during the most recently completed calendar quarter. The following is a list of the tables included:

- Table 2.1: 4th Quarter 2018 SSO Overview
- Table 2.2: 4th Quarter 2018 Manhole Overflows sorted chronologically
- Table 2.3: 4th Quarter 2018 Manhole Overflows sorted by cause
- Table 2.4: 4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 (provides a listing of individual overflow locations and lists the number of overflows for each specific location and cause for each quarter)
- Table 2.5: 4th Quarter 2018 Pump Station Overflows and Bypasses sorted chronologically
- Table 2.6: 4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 (provides a listing of individual overflow/bypass locations and lists the number of overflows for each specific location and cause for each quarter)
- Table 2.7: 4th Quarter 2018 WWTP Unpermitted Bypasses
- Table 2.8: Calendar Year 2018 SSO Overview

Table 2.1
CD Quarterly Report
Fourth Quarter 2018
SSO Overview

4th Quarter 2018 SSO Report Comparative Overview						
Source	Number of Overflows 4th QTR 2018	Number of Overflows 4th QTR 2017	Number of Overflows 3rd QTR 2018	Total Estimated Overflow Volume (gallons) 4th QTR 2018	Total Estimated Overflow Volume (gallons) 4th QTR 2017	Total Estimated Overflow Volume (gallons) 3rd QTR 2018
Manhole Overflows^	123	33	139	11,928,509	2,147,951	40,210,108
Pump Station Overflows and/or Bypasses	35	14	48	18,009,093	4,742,742	26,242,786
WWTP Unpermitted Bypasses	10	1	2	1,094,600	60,000	492,000
Cumulative Totals	168	48	189	31,032,202	6,950,693	66,944,894

^ Includes 5 Basement Backups in 4Q18, 2 Basement Backups in 4Q17, and 2 Basement Backups in 3Q18.

Quarterly Liquid Precipitation (in inches)				
Quarter	October	November	December	Total Cumulative
4th Qtr 2018	6.46	5.70	6.16	18.32
4th Qtr 2017	5.77	2.35	2.36	10.48
	July	August	September	Total Cumulative
3rd Qtr 2018	4.41	5.19	10.43	20.03
Note: Quarterly Liquid Precipitation readings were acquired from the University of Kentucky Agricultural Weather Center at the following website http://www.wagwx.ca.uky.edu/cgi-bin/ky_clim_data_www.pl				

Quarterly Significant Precipitation Events	
Date	Inches in 24-hour Period
10/5/2018	3.41
10/31/2018	0.77
11/1/2018	1.14
11/6/2018	1.78
11/15/2018	0.92
12/1/2018	0.83
12/15/2018	1.45
12/20/2018	0.88
12/31/2018	1.36
Note: Quarterly Significant Precipitation Events were acquired from the University of Kentucky Agricultural Weather Center at the following website: http://www.wagwx.ca.uky.edu/cgi-bin/ky_clim_data_www.pl	

Table 2.2
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)								
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)	Appendix A or Revised Table A-1a*		RMP Project
10/4/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	82,500	Appendix A	71	WR-4
10/4/2018	WH5_45	3134 Montavesta Rd	West Hickman	Sustained Rain Event	7,100	Appendix A	44	WH-8
10/4/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	284,000	Appendix A	45	WH-8
10/4/2018	WR2_306	1745 Traveller Rd	Wolf Run	Sustained Rain Event	4,550	Table A-1a	28	WR-9
10/4/2018	WR2_319	1733 Traveller Rd	Wolf Run	Sustained Rain Event	4,550	Table A-1a	29	WR-9
10/4/2018	WR3_308	1853 Normandy Rd	Wolf Run	Sustained Rain Event	35,000	Appendix A	66	WR-5
10/4/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	47,000	Appendix A / Table A-1a	29 / 30	WR-5
10/4/2018	WH5_123	3117 Lamar Dr	West Hickman	Sustained Rain Event	71,000	Appendix A	48	WH-8
10/5/2018	WH1_1043**	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250	-	-	WH-20
10/5/2018	WH1_1044***	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250	-	-	WH-20
10/5/2018	WH1_1045^	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250	-	-	WH-20
10/5/2018	WH1_1046^^	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250	-	-	WH-20
10/5/2018	WH2_418	3661 Niles Ct	West Hickman	Sustained Rain Event	9,250	-	-	WH-9
10/5/2018	Basement	3641 Sundart Dr	West Hickman	Debris	1,840	-	-	-
10/5/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	50,500	-	-	WH-1
10/5/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	50,500	-	-	WH-1
10/5/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	50,500	-	-	WH-1
10/5/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	16,750	Appendix A	54	WH-7
10/5/2018	WH1_1019	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250	-	-	WH-20
10/5/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	22,000	Appendix A	52	WH-12
10/5/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	11,500	Table A-1a	10	WH-11
10/5/2018	WR2_566	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	368,500	-	-	WR-9
10/5/2018	WR2_389	2382 Le Havre Rd	Wolf Run	Sustained Rain Event	67,750	-	-	WR-9
10/5/2018	WR2_393	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	368,500	-	-	WR-9
10/5/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	7,500	Appendix A	38	WH-11
10/5/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	11,000	Appendix A	82	CR-10
10/5/2018	WH1_455	787 Tyrus Ct	West Hickman	Sustained Rain Event	1,250	Table A-1a	8	WH-20
11/1/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	337,500	-	-	NE-6
11/1/2018	CR4_8	444 Cane Run Rd	Cane Run	Sustained Rain Event	185,000	-	-	CR-10
11/1/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	213,750	-	-	EH-11
11/1/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	11,250	Appendix A	71	WR-4
11/1/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	16,000	-	-	WH-1
11/6/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	190,500	-	-	WH-1
11/6/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	254,000	-	-	WH-1
11/6/2018	CR4_12	444 Cane Run Rd	Cane Run	Sustained Rain Event	185,000	-	-	CR-10

Table 2.2
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)								
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)	Appendix A or Revised Table A-1a*		RMP Project
11/6/2018	CR4_14	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	231,250	Table A-1a	33	CR-10
11/6/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	231,250	Appendix A	82	CR-10
11/6/2018	CR4_8A	438 Cane Run Rd	Cane Run	Sustained Rain Event	185,000	-	-	CR-10
11/6/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	338,750	-	-	NE-6
11/6/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	188,375	Appendix A	52	WH-12
11/6/2018	WH3_658A	3431 Sutherland Dr	West Hickman	Sustained Rain Event	171,250	Table A-1a	13	WH-12
11/6/2018	WH6_102	3641 Barrow Wood Ln	West Hickman	Sustained Rain Event	2,425	Appendix A	36	WH-11
11/6/2018	WR3_308	1853 Normandy Rd	Wolf Run	Sustained Rain Event	6,500	Appendix A	66	WR-5
11/6/2018	WH3_144	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	65,750	-	-	WH-7
11/6/2018	WH3_20	3514 Bates Creek Rd	West Hickman	Sustained Rain Event	6,575	-	-	WH-7
11/6/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	6,575	-	-	WH-7
11/6/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	263,000	Appendix A	54	WH-7
11/6/2018	WH3_67	3393 Bates Creek Rd	West Hickman	Sustained Rain Event	131,500	Appendix A	56	WH-7
11/6/2018	WH3_78C	3329 Bates Creek Rd	West Hickman	Sustained Rain Event	65,750	-	-	WH-7
11/6/2018	WH5_123	3117 Lamar Dr	West Hickman	Sustained Rain Event	67,750	Appendix A	48	WH-8
11/6/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	338,750	-	-	WH-8
11/6/2018	WH5_45	3134 Montavesta Rd	West Hickman	Sustained Rain Event	203,250	Appendix A	44	WH-8
11/6/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	338,750	Appendix A	45	WH-8
11/6/2018	WH5_45B	3134 Montavesta Rd	West Hickman	Sustained Rain Event	67,750	Appendix A	46	WH-8
11/6/2018	WH6_98	3544 Creekwood Dr	West Hickman	Sustained Rain Event	26,750	Appendix A	37	WH-11
11/6/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	254,000	-	-	WH-1
11/6/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	2,425	Appendix A	38	WH-11
11/6/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	26,750	Table A-1a	10	WH-11
11/6/2018	WH6_75	3540 Creekwood Dr	West Hickman	Sustained Rain Event	13,375	Table A-1a	9	WH-11
11/6/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	52,000	-	-	WH-1
11/6/2018	WH1_455	787 Tyrus Ct	Wolf Run	Sustained Rain Event	18,750	Table A-1a	8	WH-20
11/6/2018	WR5_93	139 Elam Park	Wolf Run	Sustained Rain Event	8,625	Table A-1a	31	WR-7
11/6/2018	WR2_319	1733 Traveller Rd	Wolf Run	Sustained Rain Event	18,750	Table A-1a	29	WR-9
11/6/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	36,750	Appendix A / Table A-1a	29 / 30	WR-5
11/6/2018	EH3_377	3297 Featherston Dr	East Hickman	Sustained Rain Event	16,750	Table A-1a	1	EH-11
11/6/2018	WR2_102	1835 Yorktown Rd	Wolf Run	Sustained Rain Event	65,000	Appendix A	69	WR-5
11/6/2018	WR2_566	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	15,250	-	-	WR-9
11/6/2018	WH3_354	3498 Greentree Rd	West Hickman	Sustained Rain Event	34,250	Table A-1a	4	WH-10
11/6/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	438,750	-	-	EH-11
11/6/2018	WR2_393	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	76,250	-	-	WR-9

Table 2.2
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)								
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)	Appendix A or Revised Table A-1a*		RMP Project
11/6/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	130,250	Appendix A	71	WR-4
11/9/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	52,000	-	-	WH-1
11/9/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	2,600	-	-	WH-1
11/9/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	196,000	-	-	WH-1
11/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	98,000	-	-	WH-1
11/15/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	196,000	-	-	WH-1
11/15/2018	WH8_378	509 Alderbrook Way	West Hickman	Debris	825	-	-	-
11/26/2018	Basement	815 Cramer Avenue	Town Branch	Grease	1,119	-	-	-
11/29/2018	WH7_280A	204 St Ann Dr	West Hickman	Sustained Rain Event	1,500	Appendix A	9	WH-1
12/1/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	138,000	-	-	NE-6
12/1/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	96,250	-	-	WH-1
12/1/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	96,250	-	-	WH-1
12/1/2018	CR4_414	2328 Allen Drive	Cane Run	Debris	475	-	-	-
12/1/2018	WH2_181	3501 Laredo Dr	West Hickman	Sustained Rain Event	10,000	Appendix A	59	WH-5
12/1/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	78,000	-	-	WH-7
12/1/2018	WH3_144	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	39,000	-	-	WH-7
12/1/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	38,000	Appendix A	71	WR-4
12/1/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	390,000	Appendix A	54	WH-7
12/1/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	32,750	Appendix A	52	WH-12
12/1/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	31,500	Appendix A	45	WH-8
12/1/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	20,000	Table A-1a	10	WH-11
12/1/2018	WH3_78C	3329 Bates Creek Rd	West Hickman	Sustained Rain Event	15,250	-	-	WH-7
12/1/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	315,000	-	-	WH-8
12/1/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	96,250	-	-	WH-1
12/1/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	17,000	-	-	EH-11
12/1/2018	WR2_91	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	35,625	Appendix A	70	WR-4
12/1/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	17,250	Appendix A	38	WH-11
12/1/2018	WH1_455	787 Tyrus Ct	West Hickman	Sustained Rain Event	13,500	Table A-1a	8	WH-20
12/2/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	11,750	Appendix A / Table A-1a	29 / 30	WR-5
12/2/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	17,250	Appendix A	82	CR-10
12/6/2018	EH4_1006	204 Mousas Way	East Hickman	Grease	225	-	-	-
12/12/2018	Basement	3156 Dale Hollow Dr	East Hickman	Debris	475	-	-	-
12/13/2018	WH7_38	2300 Richmond Rd	West Hickman	Sustained Rain Event	213,000	-	-	WH-18
12/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	213,000	-	-	WH-1
12/15/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	239,625	-	-	WH-1

Table 2.2
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)								
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)	Appendix A or Revised Table A-1a*		RMP Project
12/15/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	239,625	-	-	WH-1
12/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	53,750	-	-	WH-1
12/20/2018	EH3_377	3297 Featherston Dr	East Hickman	Sustained Rain Event	9,250	Table A-1a	1	EH-11
12/31/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	342,000	-	-	WH-1
12/31/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	342,000	-	-	WH-1
12/31/2018	Basement	860 White Wood Flt	Town Branch	Debris	784	-	-	-
12/31/2018	Basement	3669 Gladman Way	South Elkhorn	Roots	466	-	-	-
12/31/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750	-	-	WH-7
12/31/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	193,500	Appendix A	45	WH-8
12/31/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	342,000	-	-	WH-1
12/31/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750	Appendix A	54	WH-7
12/31/2018	WH3_148A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750	Appendix A	55	WH-7
12/31/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	193,500	-	-	WH-8
12/31/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	23,000	Appendix A	52	WH-12
12/31/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	14,750	Table A-1a	10	WH-11
12/31/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	10,750	Appendix A	82	CR-10
12/31/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	67,250	Appendix A	71	WR-4
12/31/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	13,000	Appendix A	38	WH-11
		Total Overflows	123		Total Estimated Overflow Volume	11,928,509		

* Appendix A refers to Appendix A of the Consent Decree which lists the locations of recurring SSOs and unpermitted discharges. Revised Table A-1a refers to a list of additional known SSOs which were not included in Appendix A of the Consent Decree, but that will be addressed by the RMP projects.

** This newly constructed manhole was previously reported as WH1_12.

*** This newly constructed manhole was previously reported as MH1A before receiving its asset ID.

^ This newly constructed manhole was previously reported as MH1 before receiving its asset ID.

^^ This newly constructed manhole was previously reported as MH2A before receiving its asset ID.

Table 2.3
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows - Sorted by Cause

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)					
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)
Debris In Line / Blockage					
10/5/2018	Basement	3641 Sundart Dr	West Hickman	Debris	1,840
11/15/2018	WH8_378	509 Alderbrook Way	West Hickman	Debris	825
12/1/2018	CR4_414	2328 Allen Drive	Cane Run	Debris	475
12/12/2018	Basement	3156 Dale Hollow Dr	East Hickman	Debris	475
12/31/2018	Basement	860 White Wood Flt	Town Branch	Debris	784
		Total Overflows	5	Total Estimated Overflow Volume	4,399
Grease					
11/26/2018	Basement	815 Cramer Avenue	Town Branch	Grease	1,119
12/6/2018	EH4_1006	204 Mousas Way	East Hickman	Grease	225
		Total Overflows	2	Total Estimated Overflow Volume	1,344
Roots					
12/31/2018	Basement	3669 Gladman Way	South Elkhorn	Roots	466
		Total Overflows	1	Total Estimated Overflow Volume	466
Sustained Rain Event					
10/4/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	82,500
10/4/2018	WR2_319	1733 Traveller Rd	Wolf Run	Sustained Rain Event	4,550
10/4/2018	WR2_306	1745 Traveller Rd	Wolf Run	Sustained Rain Event	4,550
10/4/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	47,000
10/4/2018	WH5_123	3117 Lamar Dr	West Hickman	Sustained Rain Event	71,000
10/4/2018	WH5_45	3134 Montavesta Rd	West Hickman	Sustained Rain Event	7,100
10/4/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	284,000
10/4/2018	WR3_308	1853 Normandy Rd	Wolf Run	Sustained Rain Event	35,000
10/5/2018	WR2_566	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	368,500
10/5/2018	WR2_389	2382 Le Havre Rd	Wolf Run	Sustained Rain Event	67,750
10/5/2018	WR2_393	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	368,500
10/5/2018	WH1_455	787 Tyrus Ct	West Hickman	Sustained Rain Event	1,250
10/5/2018	WH1_1019	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250

Table 2.3
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows - Sorted by Cause

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)					
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)
10/5/2018	WH1_1043**	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250
10/5/2018	WH1_1044***	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250
10/5/2018	WH1_1045^	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250
10/5/2018	WH1_1046^^	700 Southpoint Dr	West Hickman	Sustained Rain Event	1,250
10/5/2018	WH2_418	3661 Niles Ct	West Hickman	Sustained Rain Event	9,250
10/5/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	7,500
10/5/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	11,500
10/5/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	22,000
10/5/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	16,750
10/5/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	50,500
10/5/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	50,500
10/5/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	50,500
10/5/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	11,000
11/1/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	337,500
11/1/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	213,750
11/1/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	11,250
11/1/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	16,000
11/1/2018	CR4_8	444 Cane Run Rd	Cane Run	Sustained Rain Event	185,000
11/6/2018	CR4_8A	438 Cane Run Rd	Cane Run	Sustained Rain Event	185,000
11/6/2018	CR4_12	444 Cane Run Rd	Cane Run	Sustained Rain Event	185,000
11/6/2018	CR4_14	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	231,250
11/6/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	231,250
11/6/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	338,750
11/6/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	438,750
11/6/2018	EH3_377	3297 Featherston Dr	East Hickman	Sustained Rain Event	16,750
11/6/2018	WR2_102	1835 Yorktown Rd	Wolf Run	Sustained Rain Event	65,000
11/6/2018	WR2_319	1733 Traveller Rd	Wolf Run	Sustained Rain Event	18,750
11/6/2018	WH1_455	787 Tyrus Ct	Wolf Run	Sustained Rain Event	18,750
11/6/2018	WR2_566	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	15,250
11/6/2018	WR2_393	2401 Williamsburg Estates Ln	Wolf Run	Sustained Rain Event	76,250

Table 2.3
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows - Sorted by Cause

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)					
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)
11/6/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	130,250
11/6/2018	WR3_308	1853 Normandy Rd	Wolf Run	Sustained Rain Event	6,500
11/6/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	36,750
11/6/2018	WR5_93	139 Elam Park	Wolf Run	Sustained Rain Event	8,625
11/6/2018	WH3_354	3498 Greentree Rd	West Hickman	Sustained Rain Event	34,250
11/6/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	188,375
11/6/2018	WH3_658A	3431 Sutherland Dr	West Hickman	Sustained Rain Event	171,250
11/6/2018	WH6_102	3641 Barrow Wood Ln	West Hickman	Sustained Rain Event	2,425
11/6/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	2,425
11/6/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	26,750
11/6/2018	WH6_75	3540 Creekwood Dr	West Hickman	Sustained Rain Event	13,375
11/6/2018	WH6_98	3544 Creekwood Dr	West Hickman	Sustained Rain Event	26,750
11/6/2018	WH3_144	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	65,750
11/6/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	6,575
11/6/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	263,000
11/6/2018	WH3_20	3514 Bates Creek Rd	West Hickman	Sustained Rain Event	6,575
11/6/2018	WH3_67	3393 Bates Creek Rd	West Hickman	Sustained Rain Event	131,500
11/6/2018	WH3_78C	3329 Bates Creek Rd	West Hickman	Sustained Rain Event	65,750
11/6/2018	WH5_123	3117 Lamar Dr	West Hickman	Sustained Rain Event	67,750
11/6/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	338,750
11/6/2018	WH5_45	3134 Montavesta Rd	West Hickman	Sustained Rain Event	203,250
11/6/2018	WH5_45B	3134 Montavesta Rd	West Hickman	Sustained Rain Event	67,750
11/6/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	338,750
11/6/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	254,000
11/6/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	254,000
11/6/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	190,500
11/6/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	52,000
11/9/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	2,600
11/9/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	52,000
11/9/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	196,000

Table 2.3
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows - Sorted by Cause

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)					
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)
11/15/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	196,000
11/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	98,000
11/29/2018	WH7_280A	204 St Ann Dr	West Hickman	Sustained Rain Event	1,500
12/1/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	96,250
12/1/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	96,250
12/1/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	96,250
12/1/2018	NE1_132	1143 Floyd Dr	North Elkhorn	Sustained Rain Event	138,000
12/2/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	17,250
12/1/2018	EH3_1030	1325 Fenwick Rd	East Hickman	Sustained Rain Event	17,000
12/1/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	38,000
12/1/2018	WH1_455	787 Tyrus Ct	West Hickman	Sustained Rain Event	13,500
12/1/2018	WR2_91	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	35,625
12/2/2018	WR5_9	782 Allendale Dr	Wolf Run	Sustained Rain Event	11,750
12/1/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	17,250
12/1/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	20,000
12/1/2018	WH3_144	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	39,000
12/1/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	390,000
12/1/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	32,750
12/1/2018	WH2_181	3501 Laredo Dr	West Hickman	Sustained Rain Event	10,000
12/1/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	78,000
12/1/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	31,500
12/1/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	315,000
12/1/2018	WH3_78C	3329 Tates Creek Rd	West Hickman	Sustained Rain Event	15,250
12/13/2018	WH7_38	2300 Richmond Rd	West Hickman	Sustained Rain Event	213,000
12/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	213,000
12/15/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	239,625
12/15/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	239,625
12/15/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	53,750
12/20/2018	EH3_377	3297 Featherston Dr	East Hickman	Sustained Rain Event	9,250
12/31/2018	CR4_15	1502 Russell Cave Rd	Cane Run	Sustained Rain Event	10,750

Table 2.3
CD Quarterly Report
Fourth Quarter 2018
Manhole Overflows - Sorted by Cause

4th Quarter 2018 Sanitary Sewer Overflows (Manholes)					
Date	MH ID #	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)
12/31/2018	WR2_488	1618 Maywick View Ln	Wolf Run	Sustained Rain Event	67,250
12/31/2018	WH6_645	2309 The Woods Ln	West Hickman	Sustained Rain Event	13,000
12/31/2018	WH6_74	3538 Creekwood Dr	West Hickman	Sustained Rain Event	14,750
12/31/2018	WH3_658	3422 Greentree Rd	West Hickman	Sustained Rain Event	23,000
12/31/2018	WH3_56	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750
12/31/2018	WH3_55A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750
12/31/2018	WH5_45A	3134 Montavesta Rd	West Hickman	Sustained Rain Event	193,500
12/31/2018	WH5_44A	3150 Montavesta Rd	West Hickman	Sustained Rain Event	193,500
12/31/2018	WH3_148A	3051 Kirklevington Dr	West Hickman	Sustained Rain Event	80,750
12/31/2018	WH7_37	2300 Richmond Rd	West Hickman	Sustained Rain Event	342,000
12/31/2018	WH7_982	2401 Richmond Rd	West Hickman	Sustained Rain Event	342,000
12/31/2018	WH7_983	2401 Richmond Rd	West Hickman	Sustained Rain Event	342,000
		Total Overflows	115	Total Estimated Overflow Volume	11,922,300
		All Causes Overflows	123	All Causes Total Estimated Overflow Volume	11,928,509

** This newly constructed manhole was previously reported as WH1_12.

*** This newly constructed manhole was previously reported as MH1A before receiving its asset ID.

^ This newly constructed manhole was previously reported as MH1 before receiving its asset ID.

^^ This newly constructed manhole was previously reported as MH2A before receiving its asset ID.

Table 2.4
CD Quarterly Report
Fourth Quarter 2018
 vs.
Fourth Quarter 2017 and Third Quarter 2018

4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 Sanitary Sewer Overflows (Manholes)							
MH ID #	Address		Sewershed	Cause	Number of Overflows 4th QTR 2018	Number of Overflows 4th QTR 2017	Number of Overflows 3rd QTR 2018
Basement	1616	Hawthorne Ln	Cane Run	Debris			1
Basement	3792	Camelot Dr	West Hickman	Roots			1
Basement	1025	Lakefront Dr	West Hickman	Debris		1	
Basement	3500	Greenlawn Dr	West Hickman	Grease		1	
Basement	3641	Sundart Dr	West Hickman	Debris	1		
Basement	815	Cramer Avenue	Town Branch	Grease	1		
Basement	3156	Dale Hollow Dr	East Hickman	Debris	1		
Basement	860	White Wood Flt	Town Branch	Debris	1		
Basement	3669	Gladman Way	South Elkhorn	Roots	1		
CR1_129	740	W New Circle Rd	Cane Run	Sustained Rain Event			1
CR2_181	1872	Costigan Dr	Cane Run	Debris		1	
CR4_12	444	Cane Run Rd	Cane Run	Sustained Rain Event	1		1
CR4_14	1502	Russell Cave Rd	Cane Run	Sustained Rain Event	1		1
CR4_15	1502	Russell Cave Rd	Cane Run	Sustained Rain Event	4	1	2
CR4_161	704	Parkside Dr	Cane Run	Debris			2
CR4_414	2328	Allen Drive	Cane Run	Debris	1		
CR4_8	444	Cane Run Rd	Cane Run	Sustained Rain Event	1		1
CR4_8A	438	Cane Run Rd	Cane Run	Sustained Rain Event	1		1
EH3_1030	1325	Fenwick Dr	East Hickman	Sustained Rain Event	3	1	2
EH3_131	3116	High Ridge Dr	East Hickman	Roots		1	
EH3_377	3297	Featherston Dr	East Hickman	Sustained Rain Event	2	1	2
EH4_1006	204	Mousas Way	East Hickman	Grease	1		
EH4_29B	150	N Eagle Creek Dr	East Hickman	Grease			1
NE1_132	1143	Floyd Dr	North Elkhorn	Sustained Rain Event	3		2
NE1_182	1019	Industry Rd	North Elkhorn	Grease		1	
NE5_80	3500	Antilles Dr	North Elkhorn	Sustained Rain Event			1
OPRD_ARV1_CR4_550	2025	Old Paris	Cane Run	Break		1	
SE2_587	600	Vincent Way	South Elkhorn	Roots			1
SE2_6137	3273	Blenheim Way	South Elkhorn	Sustained Rain Event			1
TB3_501A	628	Winchester Rd	Town Branch	Debris		1	
TB3_510	780	Winchester Rd	Town Branch	Debris			1
WH1_1019	700	Southpoint Dr	West Hickman	Sustained Rain Event	1		
WH1_1022	900	Rockbridge	West Hickman	Sustained Rain Event			2

Table 2.4
CD Quarterly Report
Fourth Quarter 2018
 vs.
Fourth Quarter 2017 and Third Quarter 2018

4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 Sanitary Sewer Overflows (Manholes)							
MH ID #	Address		Sewershed	Cause	Number of Overflows 4th QTR 2018	Number of Overflows 4th QTR 2017	Number of Overflows 3rd QTR 2018
WH1_1043**	700	Southpoint Dr	West Hickman	Sustained Rain Event	1		2
WH1_1044***	700	Southpoint Dr	West Hickman	Sustained Rain Event	1		2
WH1_1045^	700	Southpoint Dr	West Hickman	Sustained Rain Event	1		2
WH1_1046^^	700	Southpoint Dr	West Hickman	Sustained Rain Event	1		1
WH1_16	787	Tyrus Ct	West Hickman	Sustained Rain Event			1
WH1_41	700	Veterans Park	West Hickman	Sustained Rain Event			1
WH1_45	941	Fiddler Creek Way	West Hickman	Sustained Rain Event			1
WH1_455	787	Tyrus Ct	West Hickman	Sustained Rain Event	3		2
WH1_51	3770	Forest Green Dr (Belleau Wood Park)	West Hickman	Sustained Rain Event			1
WH10_1	769	Rainwater Dr	West Hickman	Sustained Rain Event			1
WH10_2	769	Rainwater Dr	West Hickman	Sustained Rain Event			1
WH10_3	769	Rainwater Dr	West Hickman	Sustained Rain Event			1
WH2_179	3553	Laredo Dr	West Hickman	Sustained Rain Event			1
WH2_181	3501	Laredo Dr	West Hickman	Sustained Rain Event	1		2
WH2_390	2631	Wilhite Dr	West Hickman	Grease			1
WH2_418	3661	Niles Ct	West Hickman	Sustained Rain Event	1		1
WH2_419Z	3665	Niles Ct	West Hickman	Sustained Rain Event			2
WH2_477A	1457	Stephen Foster Dr	West Hickman	Sustained Rain Event			1
WH2_481A	1324	Oxhill Dr	West Hickman	Sustained Rain Event			1
WH2_502E	3716	Trent Cir,	West Hickman	Debris		1	
WH2_512	1577	Thames Dr	West Hickman	Sustained Rain Event			1
WH3_144	3051	Kirklevington Dr	West Hickman	Sustained Rain Event	2		2
WH3_148A	3051	Kirklevington Dr	West Hickman	Sustained Rain Event	1		
WH3_20	3514	Tates Creek Rd	West Hickman	Sustained Rain Event	1		
WH3_354	3498	Greentree Rd	West Hickman	Sustained Rain Event	1	1	1
WH3_450	3555	Olympia Rd	West Hickman	Sustained Rain Event			2
WH3_451	3549	Olympia Rd	West Hickman	Sustained Rain Event			2
WH3_55A	3051	Kirklevington Dr	West Hickman	Sustained Rain Event	3		2
WH3_56	3051	Kirklevington Dr	West Hickman	Sustained Rain Event	4	1	2
WH3_628	3418	Pimlico Pkwy	West Hickman	Sustained Rain Event			1
WH3_629	3430	Pimlico Pkwy	West Hickman	Sustained Rain Event			1
WH3_658	3422	Greentree Rd	West Hickman	Sustained Rain Event	4	2	2
WH3_658A	3431	Sutherland Dr	West Hickman	Sustained Rain Event	1	1	2

Table 2.4
CD Quarterly Report
Fourth Quarter 2018
 vs.
Fourth Quarter 2017 and Third Quarter 2018

4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 Sanitary Sewer Overflows (Manholes)							
MH ID #	Address		Sewershed	Cause	Number of Overflows 4th QTR 2018	Number of Overflows 4th QTR 2017	Number of Overflows 3rd QTR 2018
WH3_67	3393	Tates Creek Rd	West Hickman	Sustained Rain Event	1		2
WH3_739	3444	Dixiana Dr	West Hickman	Grease		1	
WH3_78C	3329	Tates Creek Rd	West Hickman	Sustained Rain Event	2		1
WH5_123	3117	Lamar Dr	West Hickman	Sustained Rain Event	2		2
WH5_155A	260	Old Mt Tabor Rd	West Hickman	Sustained Rain Event			1
WH5_166	260	Old Mt Tabor Rd	West Hickman	Sustained Rain Event			1
WH5_44A	3150	Montavesta Rd	West Hickman	Sustained Rain Event	3		2
WH5_45	3134	Montavesta Rd	West Hickman	Sustained Rain Event	2		2
WH5_45A	3134	Montavesta Rd	West Hickman	Sustained Rain Event	4		2
WH5_45B	3134	Montavesta Rd	West Hickman	Sustained Rain Event	1		2
WH6_102	3641	Barrow Wood Ln	West Hickman	Sustained Rain Event	1		2
WH6_104	3625	Barrow Wood Ln	West Hickman	Sustained Rain Event		1	2
WH6_429	871	Edgewater Dr	West Hickman	Sustained Rain Event			1
WH6_448A	505	Plainview Dr	West Hickman	Sustained Rain Event			1
WH6_448B	2691	Tanner Ct	West Hickman	Sustained Rain Event			1
WH6_461	871	Edgewater Dr	West Hickman	Sustained Rain Event			1
WH6_645	2309	The Woods Ln	West Hickman	Sustained Rain Event	4	2	2
WH6_74	3538	Creekwood Dr	West Hickman	Sustained Rain Event	4	2	2
WH6_75	3540	Creekwood Dr (Chinoe Creek Apts)	West Hickman	Sustained Rain Event	1	1	2
WH6_858	405	Plainview Dr	West Hickman	Sustained Rain Event			1
WH6_98	3544	Creekwood Dr (Chinoe Creek Apts)	West Hickman	Sustained Rain Event	1	1	2
WH7_280A	204	St Ann Dr	West Hickman	Sustained Rain Event	1		1
WH7_37	2300	Richmond Rd	West Hickman	Sustained Rain Event	9	2	5
WH7_38	2300	Richmond Rd	West Hickman	Sustained Rain Event	1		2
WH7_930	212	St. Ann Dr (Idle Hour Park)	West Hickman	Sustained Rain Event			1
WH7_982	2401	Richmond Rd	West Hickman	Sustained Rain Event	7	2	4
WH7_983	2401	Richmond Rd	West Hickman	Sustained Rain Event	7	2	4
WH8_378	509	Alderbrook Way	West Hickman	Debris	1		
WR1_170A	1728	Hill Rise Dr, 412	Wolf Run	Debris		1	
WR2_102	1835	Yorktown Rd (Gardenside Park)	Wolf Run	Sustained Rain Event	1	1	1
WR2_306	1745	Traveller Rd	Wolf Run	Sustained Rain Event	1		
WR2_319	1733	Traveller Rd	Wolf Run	Sustained Rain Event	2		2
WR2_389	2382	Le Havre Rd	Wolf Run	Sustained Rain Event	1		2

Table 2.4
CD Quarterly Report
Fourth Quarter 2018
 vs.
Fourth Quarter 2017 and Third Quarter 2018

4th Quarter 2018 vs. 4th Quarter 2017 and 3rd Quarter 2018 Sanitary Sewer Overflows (Manholes)							
MH ID #	Address		Sewershed	Cause	Number of Overflows 4th QTR 2018	Number of Overflows 4th QTR 2017	Number of Overflows 3rd QTR 2018
WR2_393	2401	Williamsburg Estates	Wolf Run	Sustained Rain Event	2		2
WR2_488	1616	Maywick View Ln (Wolf Run Park)	Wolf Run	Sustained Rain Event	5	1	2
WR2_566	2401	Williamsburg Estates	Wolf Run	Sustained Rain Event	2		2
WR2_91	1616	Maywick View Ln (Wolf Run Park)	Wolf Run	Sustained Rain Event	1		1
WR3_103	1835	Yorktown Rd (Gardenside Park)	Wolf Run	Sustained Rain Event			1
WR3_308	1853	Normandy Rd	Wolf Run	Sustained Rain Event	2		3
WR4_506	586	Bob O Link	Wolf Run	Debris			1
WR4_507	1608	Harrodsburg Rd	Wolf Run	Debris			1
WR5_9	782	Allendale Dr	Wolf Run	Sustained Rain Event	3		2
WR5_93	139	Elam Park	Wolf Run	Sustained Rain Event	1		2
WR7_47	275	Southland Dr	Wolf Run	Sustained Rain Event			1
				Total Number of Overflows Per Respective Qtr.	123	33	139
				Total Estimated Vol. (gal.) of Overflows Per Respective Qtr.	11,928,509	2,147,951	40,210,108

** This newly constructed manhole was previously reported as WH1_12.

*** This newly constructed manhole was previously reported as MH1A before receiving its asset ID.

^ This newly constructed manhole was previously reported as MH1 before receiving its asset ID.

^^ This newly constructed manhole was previously reported as MH2A before receiving its asset ID.

Table 2.5
CD Quarterly Report
Fourth Quarter 2018
Pump Station Overflows / Bypasses

4th Quarter 2018 Sanitary Sewer Overflows / Bypasses (Pump Stations)									
Date	Bypass / Overflow	Pump Station Name	Address	Sewershed	Cause	Estimated Overflow Volume (gallons)	Appendix A*	RMP Project	
10/5/2018	Bypass	Greenbrier 2	3592 Winchester Rd	North Elkhorn	Mechanical Failure	13,059	89	NE-4	
10/5/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	714,734	87	EH-11	
10/5/2018	Overflow	South Elkhorn	2500 Bowman Mill Rd	South Elkhorn	Excessive Rain	44,206	1	SE-1	
10/5/2018	Bypass	Greenbrier 2	3592 Winchester Rd	North Elkhorn	Mechanical Failure	1,173	89	NE-4	
10/15/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	250,416	87	EH-11	
10/31/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	799,648	13	CR-5	
10/31/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	1,869,303	87	EH-11	
11/1/2018	Overflow	Sharon Village	1985 Haggard Ct	Cane Run	Excessive Rain	2,689	90	CR-8	
11/5/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	1,423,216	87	EH-11	
11/6/2018	Overflow	Sharon Village	1985 Haggard Ct	Cane Run	Excessive Rain	34,353	90	CR-8	
11/6/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	491,988	13	CR-5	
11/6/2018	Overflow	Shandon Park 2	765 Kingston Dr	Cane Run	Excessive Rain	132,243	14	CR-5	
11/6/2018	Overflow	Greenbrier 2	3592 Winchester Rd	North Elkhorn	Excessive Rain	68,074	89	NE-4	
11/6/2018	Overflow	Shadeland	857 Glendover Rd	West Hickman	Excessive Rain	61,821	86	WH-8	
11/6/2018	Overflow	Armstrong Mill	2755 Armstrong Mill Rd	East Hickman	Excessive Rain	55,149	23	EH-8	
11/6/2018	Overflow	East Hickman	3316 Buckhorn Dr	East Hickman	Excessive Rain	517,068	19	EH-3	
11/15/2018	Bypass	Sharon Village	1985 Haggard Ct	Cane Run	Power Failure	12,023	90	CR-8	
11/15/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	512,877	13	CR-5	
11/15/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	934,958	87	EH-11	
12/1/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	1,927,431	87	EH-11	
12/1/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	708,608	13	CR-5	
12/1/2018	Overflow	Sharon Village	1985 Haggard Ct	Cane Run	Excessive Rain	42,955	90	CR-8	
12/1/2018	Overflow	Greenbrier 2	3592 Winchester Rd	North Elkhorn	Excessive Rain	45,965	89	NE-4	
12/1/2018	Overflow	Armstrong Mill	2755 Armstrong Mill Rd	East Hickman	Excessive Rain	46,056	23	EH-8	
12/1/2018	Overflow	Shadeland	857 Glendover Rd	West Hickman	Excessive Rain	71,617	86	WH-8	
12/1/2018	Overflow	East Hickman	3316 Buckhorn Dr	East Hickman	Excessive Rain	546,840	19	EH-3	
12/1/2018	Overflow	South Elkhorn	2500 Bowman Mill Rd	South Elkhorn	Excessive Rain	57,155	1	SE-1	
12/15/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	2,104,410	87	EH-11	
12/15/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	15,764	13	CR-5	
12/20/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	3,362,963	87	EH-11	
12/26/2018	Bypass	East Lake	1326 Fenwick Rd	East Hickman	Mechanical Failure	92,903	87	EH-11	
12/27/2018	Overflow	East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	767,161	87	EH-11	
12/31/2018	Overflow	Thoroughbred Acres	619 Parkside Dr	Cane Run	Excessive Rain	236,820	13	CR-5	
12/31/2018	Overflow	Sharon Village	1985 Haggard Ct	Cane Run	Excessive Rain	30,422	90	CR-8	
12/31/2018	Overflow	Greenbrier 2	3592 Winchester Rd	North Elkhorn	Excessive Rain	13,025	89	NE-4	
Total Overflows				35	Total Estimated Overflow / Bypass Volume	18,009,093			

* Appendix A refers to Appendix A of the Consent Decree which lists the locations of recurring SSOs and unpermitted discharges.

Table 2.6
CD Quarterly Report
Fourth Quarter 2018

vs.
Fourth Quarter 2017 and Third Quarter 2018
Pump Stations

4th Quarter 2018 Sanitary Sewer Overflows/Bypasses 4th Quarter 2017 and 3rd Quarter 2018 Sanitary Sewer Overflows / Bypasses (Pump Stations)							
Pump Station Name	Address	Sewershed	Cause	Bypass / Overflow	Number of Overflows/ Bypasses 4th QTR 18	Number of Overflows/ Bypasses 4th QTR 17	Number of Overflows / Bypasses 3rd QTR 18
Armstrong Mill	2755 Armstrong Mill Rd	East Hickman	Sustained Rain Event	Overflow	2	1	3
East Hickman	3316 Buckhorn Dr	East Hickman	Sustained Rain Event	Overflow	2		3
East Lake	1326 Fenwick Rd	East Hickman	Mechanical Failure	Bypass	1		
East Lake	1326 Fenwick Rd	East Hickman	Excessive Rain	Overflow	9	2	7
East Lake	1326 Fenwick Rd	East Hickman	Power Failure	Bypass			1
East Lake	1326 Fenwick Rd	East Hickman	Sustained Rain Event	Bypass			1
Greenbrier 2	3592 Winchester Rd	North Elkhorn	Mechanical Failure	Bypass	2		
Greenbrier 2	3592 Winchester Rd	North Elkhorn	Power Failure	Bypass			1
Greenbrier 2	3592 Winchester Rd	North Elkhorn	Sustained Rain Event	Overflow	3	2	6
Hamburg Place	1936 Pavilion Way	North Elkhorn	Power Failure	Bypass			1
Hartland 2	4904 Hartland Pkwy	East Hickman	Sustained Rain Event	Overflow			1
Hartland 3	4905 Hartland Pkwy	East Hickman	Sustained Rain Event	Overflow			1
Keeneland	4091 Versailles Rd	Wolf Run	Mechanical Failure	Bypass		1	
Mint Lane	1510 Man O War Blvd	South Elkhorn	Sustained Rain Event	Overflow			1
Shadeland	857 Glendover Rd	West Hickman	Sustained Rain Event	Overflow	2		3
Shandon Park 1	2330 Pierson Drive	Cane Run	Sustained Rain Event	Bypass			1
Shandon Park 2	765 Kingston Dr	Cane Run	Sustained Rain Event	Overflow	1		2
Sharon Village	1985 Haggard Ct	Cane Run	Power Failure	Bypass	1		
Sharon Village	1985 Haggard Ct	Cane Run	Sustained Rain Event	Overflow	4	2	5
South Elkhorn	2500 Bowman Mill Rd	South Elkhorn	Sustained Rain Event	Overflow	2		1
Thoroughbred Acres	619 Parkside Dr	Cane Run	Power Failure	Bypass			1
Thoroughbred Acres	619 Parkside Dr	Cane Run	Sustained Rain Event	Overflow	6	2	7
Town Branch	335 Jimmie Campbell Dr	Town Branch	Excessive Flow	Bypass		4	
Town Branch	335 Jimmie Campbell Dr	Town Branch	Lack of Capacity	Bypass			1
Winburn	1985 Russell Cave Rd	Cane Run	Sustained Rain Event	Overflow			1
Total Number of Overflow(s) / Bypass(es) Per Respective Quarter					35	14	48
Total Estimated Overflow / Bypass Vol. (gal.)					18,009,093	4,742,742	26,242,786

Table 2.7
CD Quarterly Report
Fourth Quarter 2018
WWTP Unpermitted Bypasses

4th Quarter 2018 Unpermitted Bypasses WWTP					
Date	Facility Name	Address		Cause	Estimated Overflow Volume (gallons)
10/5/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	96,000
11/1/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	114,000
11/6/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	135,000
11/15/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	84,000
11/29/2018	Town Branch WWTP	301	Lisle Industrial Ave	Computer Power Failure	20,000
12/1/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	88,500
12/2/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	88,500
12/15/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	114,000
12/20/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event*	105,000
12/31/2018	West Hickman WWTP	645	West Hickman Plant Rd	Sustained Rain Event**	249,600
Total Number of Unpermitted Bypasses					10
Total Estimated Bypass Volume					1,094,600

* The estimated overflow volume was obtained by adding the overflow volumes from WH9_6, WH1_1030 and SPWH_10.

** The estimated overflow volume was obtained by adding the overflow volumes from WH1_1030, WH1_1032, WH1_1033 and SPWH_10.

Table 2.8
CD Quarterly SSO Report
Fourth Quarter 2018
Calendar Year 2018 - Overview

Calendar Year 2018 SSO Report Comparative Overview								
Year	Number of Manhole Overflows	Number of Pump Station Overflows and/or Bypasses	Number of WWTP Unpermitted Bypasses	Annual Number of Overflows and/or Bypasses	Total Estimated Manhole Overflow Volume (gal)	Total Estimated Pump Station Overflow and/or Bypass Volume (gal)	Total Estimated WWTP Unpermitted Bypass Volume (gal)	Annual Estimated Total Overflow and/or Bypass Volume (gal)
CY 2018*	615	164	18	797	116,518,298	90,559,616	2,923,100	210,001,014
CY 2017	201	63	3	267	20,112,102	21,046,709	180,000	41,338,811
CY 2016	141	47	1	189	4,341,236	19,490,078	2,087,055	25,918,369
CY 2015	591	123	3	717	123,084,724	130,651,763	17,757,000	271,493,487
CY 2014	302	90	1	393	40,704,022	43,003,220	1,000	83,708,242
CY 2013	334	158	0	492	27,268,131	153,998,847	0	181,266,978
CY 2012	134	62	1	197	5,010,472	12,816,344	1,000,000	18,826,816
CY 2011	625	235	0	860	138,127,303	127,179,940	0	265,307,243
CY 2010	351	118	1	470	30,077,591	200,226,544	12,240,000	242,544,135
CY 2009	271	149	2	422	14,879,855	59,626,724	531,500	75,038,079
CY 2008	404	145	1	550	63,841,270	90,096,259	11,800,000	165,737,529
Average	361	123	3	487	53,087,728	86,245,095	4,410,878	143,743,700

* Two Pump Station SSOs were omitted in the Quarterly Reports for the First and Second Quarter (East Lake PS on 3/28/18 with eNotification 62827 and 5/31/18 with eNotification 64328). Two Pump Station estimated overflow volumes were entered incorrectly in the Quarterly Reports for the First and Third Quarter (East Lake PS on 2/24/18 should have been 2,355,447 gal and Shadeland PS on 9/24/18 should have been 201,867 gal).

Annual Liquid Precipitation												
Month	CY 2018 Monthly Liquid Precipitation (in)	CY 2017 Monthly Liquid Precipitation (in)	CY 2016 Monthly Liquid Precipitation (in)	CY 2015 Monthly Liquid Precipitation (in)	CY 2014 Monthly Liquid Precipitation (in)	CY 2013 Monthly Liquid Precipitation (in)	CY 2012 Monthly Liquid Precipitation (in)	CY 2011 Monthly Liquid Precipitation (in)	CY 2010 Monthly Liquid Precipitation (in)	CY 2009 Monthly Liquid Precipitation (in)	CY 2008 Monthly Liquid Precipitation (in)	Average Precipitation (in)
January	2.10	4.72	1.21	1.85	2.31	4.48	3.54	2.02	3.20	4.32	3.91	3.06
February	10.44	3.39	4.49	3.00	4.73	1.58	3.22	6.24	1.61	2.53	6.11	4.30
March	5.32	3.28	2.53	6.58	2.89	5.35	2.88	4.69	1.22	2.39	6.31	3.95
April	4.34	1.75	3.15	11.39	5.99	4.87	2.27	12.70	2.29	4.79	5.89	5.40
May	7.49	5.73	6.64	2.07	5.41	5.66	2.89	6.45	9.95	6.04	4.33	5.70
June	4.28	5.73	4.56	5.45	5.16	7.10	2.35	3.20	4.59	5.19	3.59	4.65
July	4.41	5.32	4.98	9.83	3.39	9.12	8.01	4.58	6.06	7.57	3.41	6.06
August	5.19	5.07	6.54	2.23	10.25	4.91	2.15	3.64	0.80	4.53	2.18	4.32
September	10.43	3.74	1.67	2.71	4.36	1.86	5.79	5.97	0.61	5.90	1.42	4.04
October	6.46	5.77	0.83	3.38	4.73	4.99	1.32	4.41	1.24	5.77	1.53	3.68
November	5.70	2.35	1.34	2.76	2.44	3.20	1.76	7.68	4.44	0.98	2.53	3.20
December	6.16	2.36	7.11	7.68	3.07	5.58	6.30	4.43	2.42	4.03	6.03	5.02
Total Cumulative	72.32	49.21	45.05	58.93	54.73	58.70	42.48	66.01	38.43	54.04	47.24	53.38

Note: Annual Liquid Precipitation readings were acquired from the University of Kentucky Agricultural Weather Center at the following website: http://www.wagwx.ca.uky.edu/cgi-bin/ky_clim_data_www.pl

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(iii) The anticipated projects and activities that will be performed in the next quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format.

LFUCG's Response:

The following table provides information on projects and activities anticipated in the next calendar quarter related to the sanitary sewer system. Table 3.1 highlights activities related to the Remedial Measures Plans and the Capacity, Management, Operation and Maintenance Programs.

Table 3.1
CD Quarterly Report
Fourth Quarter 2018

Consent Decree Section Number	Task	Work Anticipated to be Completed – First Quarter (January 1, 2019 – March 31, 2019)	
Sanitary Sewer System and WWTP Remedial Measures Plan (RMP)			
VII(15)(G)	Group 1 – Sanitary Sewer System and WWTP RMP (EH, WH, WR)	The EPA and KDEP issued a full approval of the RMPs, including Implementation Schedule dated February 12, 2016, on March 18, 2016.	
	Group 2 – Sanitary Sewer System and WWTP RMP (TB, CR)		
	Group 3 – Sanitary Sewer System and WWTP RMP (NE, SE)		
VII(15)(G)(viii)	Sanitary Sewer System and WWTP RMP Implementation – Project Status	<p>The following RMP Projects are anticipated to be in the design phase during the first quarter of 2019:</p> <ul style="list-style-type: none">• CR-8 Sharon Village PS and FM• CR-12 Lexmark Trunk A• CR-13 Lexmark Trunk B• TB-6 UK Trunk C• TB-7 UK Trunk D• TB-8 UK Trunk E• TB-11 WWTP-3 Aeration Basins• TB-11 WWTP-11 Secondary Digesters / Sludge Holding• WH-21 WWTP-4 BPR Improvements	<p>The following RMP Projects are anticipated to be under construction during the first quarter of 2019 (continued):</p> <ul style="list-style-type: none">• TB-11 WWTP-7 Gravity Thickeners• TB-11 WWTP-10 Primary Digesters• WH-1 WH7 Wet Weather Storage Tank• WH-5 Lansdowne South Trunk• WH-6 West Hickman Main Trunk D• WH-20 West Hickman WWTP Wet Weather Storage Tank• WH-21 WWTP-1 Influent Pump Station (with WH-20)• WH-21 WWTP-2 Raw Sewage Pump Station (with WH-20)• WH-21 WWTP-3 Leaping Weir (with WH-20)• WH-21 WWTP-7 Clarifier Flow Distribution• WH-21 WWTP-13 Waste Sludge Holding• WH-21 WWTP-17 Scum Facility• WH-21 WWTP-18 Non-potable Water System (with WH-20)• WH-21 WWTP-20 Odor Control Facilities, Phase 2 (with WH-20)• WR-2 Wolf Run Main Trunk B• WR-3 Wolf Run Main Trunk C
		<p>The following RMP projects are anticipated to be under construction during the first quarter of 2019:</p> <ul style="list-style-type: none">• CR-2 Expansion Area 3 Pump Station• CR-3 Expansion Area 3 Force Main• CR-4 Expansion Area 3 Trunk• CR-5 Shandon Park Trunks• CR-6 Winburn Trunk• CR-7 Thoroughbred Acres Trunk• CR-11 Cane Run Trunk• EH-2 East Hickman Pump Station, Phase 1• EH-3 East Hickman Wet Weather Storage Tank• EH-11 Eliminate East Lake Pump Station• TB-10 Midland Avenue Trunk, Phase 1 (TBC)	<p>The following projects are anticipated to be completed during the first quarter of 2019:</p> <ul style="list-style-type: none">• WH-21 WWTP-13 Waste Sludge Holding• WH-21 WWTP-17 Scum Facility

Table 3.1
CD Quarterly Report
Fourth Quarter 2018

Consent Decree Section Number	Task	Work Anticipated to be Completed – First Quarter (January 1, 2019 – March 31, 2019)
Capacity, Management, Operation and Maintenance (CMOM) Programs		
VII(16)	CMOM Programs Self-Assessment	<p>The CMOM Programs Self-Assessment, dated June 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, without further comment.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ All CMOM elements associated with the CMOM Self-Assessment have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the CMOM Self-Assessment elements during the first quarter of 2019.
VII(16)(A)	Sewer Overflow Response Plan (SORP)	<p>The SORP, dated July 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, without further comment.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ All CMOM elements associated with the SORP have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the SORP elements during the first quarter of 2019.
VII(16)(B)	System Capacity Assurance Program (CAP)	<p>The CAP, dated March 2014, was approved by the EPA and Kentucky EEC on July 3, 2014.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ Accept bid and award contract to outside vendor and initiate 2019 temporary rainfall and flow monitoring period to support the annual model recalibration / verification. ○ Complete the Technical Memorandum summarizing the 2018 model recalibration / verification and rainfall / flow monitoring data analysis. ○ Complete hydraulic model corrections based on completed model profile checks in the Wolf Run, Cane Run, and South Elkhorn Sewersheds. ○ Continue CAP implementation by reviewing / processing capacity requests for flow increases to the LFUCG sewer system in accordance with the CAP Plan. ○ Continue to provide modeling support during design of RMP projects and update the model for other non-RMP sewer improvements completed by LFUCG. ○ Harvest earned credits from sewer improvements completed by LFUCG in 1Q19. ○ Perform minor enhancements / maintenance of the Credit Tracking Information Management System (CTIMS) software, as necessary. ○ All CMOM elements associated with the CAP have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the CAP elements during the first quarter of 2019.

Table 3.1
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Consent Decree Section Number	Task	Work Anticipated to be Completed – First Quarter (January 1, 2019 – March 31, 2019)
VII(16)(C)	Fats, Oils, and Grease (FOG) Control Program	<p>The FOG Control Program, dated December 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, with comment.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ Continue routine inspections of Food Service Establishments (FSEs) based on risk ranking. ○ Continue FOG permit application review and permit issuance. ○ Continue distribution of residential FOG brochures to apartment complexes and residences. ○ Continue work with LFCHD to incorporate FOG training services in Food Manager Certification Classes. ○ All CMOM elements associated with the FOG Control Program have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the FOG Control Program elements during the first quarter of 2019.
VII(16)(D)	Gravity Line Preventative Maintenance Program (GLPMP)	<p>The GLPMP, dated December 2011, was approved by the EPA and Kentucky EEC on August 17, 2012, with comment.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ Initiate Annual Inspection Program (Routine Hydraulic Cleaning) for 2019. ○ All CMOM elements associated with the GLPMP have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the GLPMP elements during the first quarter of 2019.
VII(16)(E)	Pump Station Operation Plan for Power Outages (PSOPPO)	<p>The PSOPPO, dated September 2012, was approved by the EPA and Kentucky EEC on October 3, 2013.</p> <ul style="list-style-type: none"> • Work anticipated to be completed during the first quarter of 2019 is as follows: <ul style="list-style-type: none"> ○ All CMOM elements associated with the PSOPPO have been initiated for implementation; therefore, LFUCG will continue to implement and evaluate the PSOPPO elements during the first quarter of 2019.

The following table provides information on projects and activities anticipated in the next calendar quarter related to the storm sewer system. Table 3.2 highlights various Stormwater Quality Management Program activities anticipated for the next quarter.

Table 3.2
CD Quarterly Report
Fourth Quarter 2018
Stormwater Quality Management Program
Activities Anticipated for the First Quarter 2019

1.	Performance Standards – LFUCG will continue implementing recurring Performance Standards.
2.	Stormwater Quality Management Program – LFUCG will continue implementing the <u>Stormwater Quality Management Program</u> , dated June 1, 2016.
3.	Water Quality Management Fee Implementation – Ongoing Stormwater Quality Projects Incentive Grant Program grants will continue and will be completed as scheduled. Any executed grant award agreements will be forwarded to the Urban County Council for approval. Anticipated future meeting dates of the Water Quality Fees Board are January 10, 2019, and April 11, 2019. The main topic for the January meeting will be to review programmatic changes and FY 2020 grant application documents.
4.	<p>Public Education and Outreach –</p> <ul style="list-style-type: none"> • LFUCG will continue to update its website about the stormwater program. • The database of people wanting to receive information from DWQ by email will continue to be updated. • LFUCG will continue to develop and publish success stories. • EQPW staff will attend events to promote the stormwater and water quality program. • LFUCG will continue to air its stormwater videos and staff will record an episode on wastewater and stormwater for Lex Go Green Radio.

5.	<p>Public Involvement and Participation –</p> <ul style="list-style-type: none"> • EQPW staff will participate in the Kentucky River Watershed Watch Annual Conference and the West Hickman Watershed Council Meeting during the first quarter. • LFUCG will continue to facilitate volunteer service opportunities during the first quarter, including storm drain stenciling. • The Stormwater Stakeholder Advisory Committee will continue meeting.
6.	<p>Illicit Discharge Detection and Elimination – IDDE investigations will continue and staff will continue sending educational information to residents and responsible parties of illicit discharges.</p>
7.	<p>Construction Site Stormwater Runoff Control – Monthly active construction site inspections and targeted inspections will continue.</p>
8.	<p>Post-Construction Stormwater Management in New Development and Redevelopment – Inspections of detention basins, retention ponds, stormwater control devices, and critical culverts will continue. LFUCG will continue to coordinate with property owners to ensure maintenance of stormwater control devices, and will continue to conduct initial stormwater quality BMP inspections for additions to the inventory, as sites become known to DWQ staff. Lexington will host a Post-Construction Stormwater Management Workshop on March 8.</p>
9.	<p>Pollution Prevention for Municipal Operations – LFUCG will continue quarterly inspections and maintenance of city-owned stormwater quality control BMPs.</p> <p>Litter and woody debris removal will continue in streams, drainageways, and public right-of-way areas adjacent to the stormwater collection system.</p>
10.	<p>Industrial Facility Stormwater Pollution Prevention – The inventory of industrial facilities and high-risk commercial facilities will continue to be updated and inspections of facilities will continue. Facilities will submit monitoring data and updated SWPPPs during the first quarter. Representative Industrial Outfall Monitoring will continue during the first quarter.</p>
11.	<p>Water Quality Monitoring – Permit-required monitoring will continue. Phase 1 Screening of West Hickman will continue during the first quarter.</p>
12.	<p>Reporting and Recordkeeping – Ongoing recordkeeping will continue.</p>

13.	TMDLs and Impaired Waters – LFUCG will continue drafting a TMDL BMP Implementation Strategy that lists the BMPs that will be proposed for implementation.
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Table 3.3 provides information on anticipated progress in the next calendar quarter related to the implementation of the Supplemental and Commonwealth Environmental Projects required by the Consent Decree.

Table 3.3
CD Quarterly Report
Fourth Quarter 2018
Supplemental and Commonwealth Environmental Projects
Progress Anticipated for the First Quarter 2019

J-1	Coldstream Park Stream Corridor Restoration and Preservation SEP – LFUCG is assuming this SEP is complete unless directed otherwise by EPA.
J-2	Green Infrastructure SEP – Complete.
K-1	Blue Sky Package Treatment Plant Elimination Project – Complete.
K-2	<p>Flooding Evaluation Project – The following progress is anticipated during the first quarter:</p> <p>The Urban County Council will approve the WGPL area construction contract in January with construction to begin during the first quarter. The construction contract for the Goodrich water quality basin for the Southland stormwater project will bid in February. The design of the Southland Park / Tucson / Yuma improvements will begin.</p> <p>Detailed design of a diversion storm sewer will begin for Peachtree (#71.5) and Woodhill (#72).</p> <p>Findings to mitigate flooding at the intersection of Elizabeth Street and Forest Park will be presented at a neighborhood meeting for the Elizabeth St. (#60) project.</p> <p>Questionnaire responses completed by residents in the Rosemary / Bermuda (#76) project area will be evaluated for viability of the project.</p> <p>Questionnaire responses completed by residents in the Joyland (#78) project area will be evaluated for viability of the project.</p>

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(iv) If LFUCG violates any requirement of this Consent Decree or has reason to believe that it is likely to violate any requirement of this Consent Decree in the future, LFUCG shall notify the United States and EPPC of such violation and its likely duration, with an explanation of the violation's likely cause and of the remedial steps taken, and/or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, LFUCG shall include a statement to that effect in the report. LFUCG shall investigate to determine the cause of the violation and then shall submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) days after the quarterly report.

LFUCG's Response:

LFUCG missed the deadline for seventeen RMP Projects which were scheduled to be complete by December 31, 2018. LFUCG anticipated missing the end-of-2018-deadline for fifteen of the seventeen RMP Projects as of submitting the Third Quarter 2018 CD Quarterly Report, but an additional two RMP Projects at the West Hickman WWTP were not completed by the end of the year as was anticipated. Of the seventeen projects that missed the deadline of December 31, 2018, sixteen are under construction and are expected to be completed in 2019. The single end-of-2018-deadline project not yet under construction has been delayed due to easement acquisition problems, including at least one easement currently being acquired by eminent domain. At this time, LFUCG also anticipates missing the deadline for two RMP Projects scheduled for completion by December 31, 2019.

RMP Projects with a Deadline of December 31, 2018:

Expansion Area 3 PS (CR-2)

This project is a new sanitary sewer pump station (PS) detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the

contractor has promised an April 30, 2019 in-service date for the EA3 PS, but has not yet displayed an ability to meet deadlines. Lexington believes that a June 30, 2019 in-service date for the EA3 PS is more realistic, which will be six months past the deadline.

While the Notice to Proceed was issued on December 7, 2017, the contractor experienced delays while constructing the deep wet well during the initial months of construction, which coincided with an abnormally rainy February. Lexington's total rainfall in 2018 was more than 26" above normal, which exacerbated the groundwater challenges that were already expected for this part of the construction. All the improvements associated with the Expansion Area 3 PS project are anticipated to be complete by April 30, 2019.

Expansion Area 3 FM (CR-3)

This project is a new force main (FM), associated with the Expansion Area 3 (EA3) PS, detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. Construction of the EA3 force main was completed on September 6, 2018, which was approximately three months prior to the deadline; however, service of this force main depends on the EA3 PS being placed into service. As mentioned above, the contractor has promised an April 30, 2019 in-service date for the EA3 PS, but has not yet displayed an ability to meet deadlines. Lexington believes that a June 30, 2019 in-service date for the EA3 PS is more realistic, which means the EA3 FM will not be placed into service until that time.

Expansion Area 3 Trunk (CR-4)

This project is a new sanitary trunk sewer, which will flow into the EA3 PS, detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. Construction of the EA3 Trunk was completed on December 11, 2018, which was approximately three weeks prior to the deadline; however, service of this trunk sewer depends on the EA3 PS being placed into service. As mentioned above, the contractor has promised an April 30, 2019 in-service date for the EA3 PS, but has not yet displayed an ability to meet deadlines. Lexington believes that a June 30, 2019 in-service date for the EA3 PS is more realistic, which means the EA3 Trunk will not be placed into service until that time.

Shandon Park Trunks (CR-5)

This project is a new sanitary trunk sewer, which discharges into the Expansion Area 3 Trunk, detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this trunk sewer is June 30, 2019, which will be approximately six months past the deadline. While the Notice to Proceed was issued on March 1, 2018, deep excavation coupled with unforeseen conditions and higher than normal precipitation led to significant construction delays (Lexington's total rainfall in 2018 was more than 26" above normal). In order to complete construction of the Shandon Park Trunks, the EA3 Trunk and EA3 PS have to be operational before this project can tie into the EA3 Trunk and begin conveying sewage.

Winburn Trunk (CR-6)

This project is a new sanitary trunk sewer, which discharges into the Expansion Area 3 Trunk, detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this trunk sewer is June 30, 2019, which will be approximately six months past the deadline. While the Notice to Proceed was issued on March 1, 2018, deep excavation coupled with unforeseen conditions and higher than normal precipitation led to significant construction delays (Lexington's total rainfall in 2018 was more than 26" above normal). In order to complete construction of the Winburn Trunk, the EA3 Trunk and EA3 PS have to be operational before this project can tie into the EA3 Trunk and begin conveying sewage.

Thoroughbred Acres Trunk (CR-7)

This project is a new sanitary trunk sewer, which discharges into the Expansion Area 3 Trunk, detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this trunk sewer is June 30, 2019, which will be approximately six months past the deadline. While the Notice to Proceed was issued on March 1, 2018, deep excavation coupled with unforeseen conditions and higher than normal precipitation led to significant construction delays (Lexington's total rainfall in 2018 was more than 26" above normal). In order to complete construction of the Thoroughbred Acres Trunk, the EA3 Trunk and EA3 PS have to be operational before this project can tie into the downstream system and begin conveying sewage.

Town Branch WWTP Primary Digesters (TB-11 WWTP-10)

The project to upgrade the Town Branch WWTP primary digesters is a component of RMP Project TB-11 (Town Branch WWTP Reliability Upgrades) detailed in the RMP Group 2 submittal in April 2012. According to the approved WWTP Reliability Upgrade Projects schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for the upgrade of the primary digesters is December 21, 2019, which will be approximately 12 months past the deadline. The reason for the completion delay is provided below.

TB WWTP has three (3) primary digesters using equipment that is over 25 years old. The concrete structures associated with the digesters are in good condition; however, the digester equipment needs to be replaced to ensure functionality. The original primary digester upgrade project components included replacement of the digester covers, mixing systems, boilers, heat exchangers, and waste gas flare.

During preliminary design discussions, it became apparent that the scope of the project needed to be significantly expanded to meet the requirements of NFPA 820 (Standard for Fire Protection in Wastewater Treatment and Collection Facilities, published by National Fire Protection Association), which came into effect after construction of the existing primary digester complex. The existing primary digester complex was completed in 1989 and NFPA 820 was

published in 1990. NFPA 820 requires the relocation of air supply equipment, the separation of non-hazardous and hazardous classified areas, the isolation of digester gas handling equipment, and the relocation of the boilers.

LFUCG originally estimated the cost to upgrade the primary digesters to be \$3,525,000; however, the expanded scope of the upgrade, which will incorporate the NFPA requirements, has created a project cost of \$9,746,750. Additionally, the expanded project scope has also lengthened the original project construction schedule due to the additional work required to meet NFPA 820, the necessary equipment procurement lead times, and a more complex rehabilitation of the primary digester covers.

The Notice to Proceed was issued on April 24, 2018 and construction was initiated on May 1, 2018. Construction is expected to take a total of 600 calendar days; therefore, all the improvements associated with the TB WWTP Primary Digesters project are anticipated to be complete by December 21, 2019. No recurring SSOs are anticipated to be impacted by the delay in completion of this project.

WH-7 Wet Weather Storage (WWS) Tank (WH-1)

This project is a WWS tank located in the northern portion of the West Hickman Sewershed as detailed in the RMP Group 1 submittal dated October 2011. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this project is April 30, 2019, which will be approximately four months past the deadline.

While the Notice to Proceed was issued on December 18, 2017, the contractor experienced delays during construction due to weather and miscellaneous site improvements associated with the pump station. Lexington's total rainfall in 2018 was more than 26" above normal, which exacerbated stormwater management and groundwater challenges at both the tank and pump station sites.

West Hickman WWTP WWS Tank (WH-20)

This project is a WWS tank located at the West Hickman WWTP as detailed in the RMP Group 1 submittal dated October 2011. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this project is April 30, 2019, which will be approximately four months past the deadline.

The Notice to Proceed was issued on August 1, 2016; however, the contractor experienced delays during construction due to weather. Lexington's total rainfall in 2018 was more than 26" above normal, which has exacerbated stormwater management and groundwater challenges at the project site. Additionally, several change orders and other miscellaneous site improvements requiring additional time for project construction have been issued to the contractor.

West Hickman WWTP Reliability Upgrades (WH-21)

In an attempt to improve efficiency, five WWTP Reliability Upgrades Projects were included in the design and construction of the West Hickman WWTP WWS Tank (WH-20) project. These five projects are:

- Influent Pump Station (WWTP-1)
- Raw Sewage Pump Station (WWTP-2)
- Leaping Weir (WWTP-3)
- Non-potable Water System (WWTP-18)
- Odor Control Facilities, Phase 2 (WWTP-20)

Each of these projects is located at the West Hickman WWTP and detailed in the RMP Group 1 submittal dated October 2011. According to the approved WWTP Reliability Upgrade Projects schedule dated February 2016, each of the projects was to be functionally operational by December 31, 2018. At this time, the projected completion date for these projects is April 30, 2019, which will be approximately four months past the deadline.

While the Notice to Proceed was issued on August 1, 2016, the contractor experienced delays during construction due to weather. Lexington's total rainfall in 2018 was more than 26" above normal, which has exacerbated stormwater management and groundwater challenges at the project site. Additionally, several change orders and other miscellaneous site improvements requiring additional time for project construction have been issued to the contractor.

West Hickman WWTP Waste Sludge Holding (WH-21 WWTP-13)

The project to upgrade the West Hickman WWTP waste sludge holding tank is a component of RMP Project WH-21 (West Hickman WWTP Reliability Upgrades) detailed in the RMP Group 1 submittal in October 2011. According to the approved WWTP Reliability Upgrade Projects schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for the upgrade of the waste sludge holding tank is March 31, 2019, which will be approximately three months past the deadline. The reason for the completion delay is provided below.

The Notice to Proceed was issued on June 6, 2018, and construction was initiated on June 26, 2018. Although the contractor had prepared the top surface of the waste sludge holding tank for installation of the geodesic dome tank cover, manufacturer shipping issues delayed the delivery of the geodesic dome tank cover to late December 2018. The tank cover will be installed in the first quarter of 2019. No recurring SSOs are anticipated to be impacted by the delay in completion of this project.

West Hickman WWTP Scum Facility (WH-21 WWTP-17)

The project to upgrade the West Hickman WWTP scum facility is a component of RMP Project WH-21 (West Hickman WWTP Reliability Upgrades) detailed in the RMP Group 1 submittal in October 2011. According to the approved WWTP Reliability Upgrade Projects schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for the upgrade of the scum facility is March 31, 2019, which

will be approximately three months past the deadline. The reason for the completion delay is provided below.

The Notice to Proceed was issued on June 6, 2018, and construction was initiated on June 26, 2018. A requirement in the construction documents to lower the water surface elevation in the scum facility by approximately three inches caused delays as the contractor attempted several changes in plant operation in order to achieve the three inch reduction. As none of the changes in plant operation led to the successful lowering of the water surface elevation, the project team agreed that the effluent weirs will have to be lowered later in the construction sequence. No recurring SSOs are anticipated to be impacted by the delay in completion of this project.

Wolf Run Main Trunk B (WR-2)

This project is a new sanitary sewer trunk detailed in the RMP Group 1 submittal in October 2011. According to the approved RMP Implementation Plan schedule dated February 2016, this project was to be functionally operational by December 31, 2018. At this time, the projected completion date for this trunk sewer is December 31, 2019, which will be approximately twelve months past the deadline.

The reason for the completion delay is due to issues associated with easement acquisition. During easement negotiations, the owners of several properties within the project alignment were initially uncooperative which caused easement acquisition to take longer than originally anticipated. Currently, the project design is complete and easement acquisitions have been finalized. The construction contract for this project is scheduled to be advertised for bid in January 2019. Construction of the Wolf Run Main Trunk B project is anticipated to be complete by December 31, 2019.

RMP Projects with a Deadline of December 31, 2019:

UK Trunk C (TB-6)

This project is a new sanitary trunk sewer detailed in the RMP Group 2 submittal in April 2012. According to the approved RMP Implementation Plan schedule dated February 2016, this project is to be functionally operational by December 31, 2019. At this time, the projected completion date for this trunk sewer is December 31, 2020, which will be approximately twelve months past the deadline.

The reason for the completion delay is primarily due to the design complexity associated with the requirements of a large diameter pipe under a major urban area with multiple utility conflicts. Multiple design alternatives have been evaluated, including tunnels and wet weather diversion pumping stations, which have extended the original design period planned for this project. At this point, LFUCG has exhausted the alternatives analysis and has resumed with a design that is equivalent to the original concept. The current construction start target date is June 15, 2019. All the improvements associated with the UK Trunk C project are anticipated to be complete by December 31, 2020.

Wolf Run Main Trunk C (WR-3)

This project is a new sanitary sewer trunk detailed in the RMP Group 1 submittal in October 2011. According to the approved RMP Implementation Plan schedule dated February 2016, this project is to be functionally operational by December 31, 2019. At this time, the projected completion date for this trunk sewer is April 30, 2020, which will be approximately four months past the deadline.

The reason for the completion delay is due to issues associated with easement acquisition. During easement negotiations, the owners of several properties within the project alignment have been uncooperative which has caused easement acquisition to take longer than originally anticipated. In fact, Lexington is currently in the process of acquiring at least one easement by eminent domain. The construction contract for this project is scheduled to be advertised for bid in January 2019, and construction of the Wolf Run Main Trunk C project is anticipated to be complete by April 30, 2020.

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(v) Any additional information that demonstrates that LFUCG is implementing the remedial measures required in this Consent Decree.

LFUCG's Response:

The following table lists the items that have been submitted to EPA and EEC, the date submitted, and the current approval status, if applicable.

Table 5.1
CD Quarterly Report
Fourth Quarter 2018
Consent Decree Deliverables
Submitted as of January 29, 2019

Project/Program/Report Name	Date Submitted	Current Approval Status
Notification of WWTP Backup Power Installation/Completion	2008-Mar-31	N/A
SSA Work Plan	2008-Jun-09	EPA/EEC review complete – 2012-Aug-17 Certified Letter No. 70101060000217059186

Project/Program/Report Name	Date Submitted	Current Approval Status
Hydraulic Model Report	2008-Jul-08	EPA/EEC review complete – 2012-Aug-17 Certified Letter No. 70101060000217059186
Notification of Appendix F Cross Connections Eliminated	2008-Jul-09	N/A
Sewer Overflow Response Plan (initial submittal)	2008-Jul-25	EPA/EEC informal comments – 2011-Mar-17 Certified Letter No. 70101060000217047404; LFUCG resubmitted
CMOM Programs Self-Assessment (initial submittal)	2008-Aug-26	EPA/EEC informal comments – 2010-Dec-6 Certified Letter No. 70052570000148867697; LFUCG resubmitted
Capacity Assessment Work Plan	2008-Sep-09	EPA/EEC review complete – 2012-Aug-17 Certified Letter No. 70101060000217059186
2008 Annual Report	2009-Jan-29	N/A
Notification of Pump Station Design, Capacity, and Equipment Condition Adequacy Evaluation Report Completion	2009-Mar-07	N/A
First Quarter 2009 Quarterly Report	2009-Apr-29	N/A
Pump Station Operation Plan for Power Outages (initial submittal)	2009-May-14	EPA/EEC informal comments – 2011-Mar-17 Certified Letter No. 70101060000217047404; LFUCG resubmitted
Second Quarter 2009 Quarterly Report	2009-Jul-29	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
Fats, Oils, and Grease Control Program (initial submittal)	2009-Aug-10	EPA/EEC informal comments – 2011-Mar-17 Certified Letter No. 70101060000217047404; LFUCG resubmitted
Gravity Line Preventative Maintenance Program (initial submittal)	2009-Aug-13	EPA/EEC informal comments – 2011-Mar-17 Certified Letter No. 70101060000217047404; LFUCG resubmitted
North Elkhorn Force Main Diversion Project	2009-Oct-29 via quarterly report	N/A
Third Quarter 2009 Quarterly Report	2009-Oct-29	N/A
Fourth Quarter 2009 Quarterly Report	2010-Jan-28	N/A
2009 Annual Report	2010-Jan-28	N/A
First Quarter 2010 Quarterly Report	2010-Apr-29	N/A
MS4 Permit Annual Report for 2009 (Fiscal Year 2009 – Calendar Year 2009)	2010-Jul-14	N/A
Second Quarter 2010 Quarterly Report	2010-Jul-23	N/A
South Elkhorn Pump Station and Force Main Upgrade	2010-Oct-28 via quarterly report	N/A
Third Quarter 2010 Quarterly Report	2010-Oct-28	N/A
Fourth Quarter 2010 Quarterly Report	2011-Jan-28	N/A
2010 Annual Report	2011-Jan-28	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
SSA Group 1 Report	2011-Apr-12	EPA/EEC comments – 2011-Oct-14 Certified Letter No. 70101060000217055027; LFUCG response dated 2011-Nov-18
First Quarter 2011 Quarterly Report	2011-Apr-29	N/A
Sewer Overflow Response Plan (second submittal)	2011-Jun-29	EPA/EEC approved without further comment – 2012-Aug-17 Certified Letter No. 70101060000217059186
CMOM Programs Self-Assessment (second submittal)	2011-Jul-01	EPA/EEC approved without further comment – 2012-Aug-17 Certified Letter No. 70101060000217059186
MS4 Permit Annual Report for Calendar Year 2010	2011-Jul-14	N/A
List of Future Authorized Connections	2011-Jul-21 via quarterly report	N/A
Second Quarter 2011 Quarterly Report	2011-Jul-21	N/A
Pump Station Operation Plan for Power Outages (second submittal)	2011-Sep-30	EPA/EEC comments – 2012-Aug-17 Certified Letter No. 70101060000217059186; LFUCG resubmitted

Project/Program/Report Name	Date Submitted	Current Approval Status
RMP Group 1	2011-Oct-12	EPA/EEC approved with the exception of the proposed implementation schedule – 2014-Nov-18 Certified Letter No. 70121010000207596533 <u>First Material Modification to Consent Decree</u> filed 2015-Jul-9 approves June 2014 overall implementation schedule EPA/EEC full approval of the RMPs including the project implementation schedule dated Feb 2016 – 2016-Mar-18 Certified Letter No. 70151730000180442722
SSA Group 2 Report	2011-Oct-13	No formal comments received from EPA/EEC
Third Quarter 2011 Quarterly Report	2011-Oct-27	N/A
Fats, Oils, and Grease Control Program (second submittal)	2011-Dec-16	EPA/EEC approved with comment – 2012-Aug-17 Certified Letter No. 70101060000217059186
Gravity Line Preventative Maintenance Program (second submittal)	2011-Dec-19	EPA/EEC approved with comment – 2012-Aug-17 Certified Letter No. 70101060000217059186
Fourth Quarter 2011 Quarterly Report	2012-Jan-27	N/A
2011 Annual Report	2012-Jan-30	N/A
SSA Group 3 Report	2012-Apr-12	No formal comments received from EPA/EEC

Project/Program/Report Name	Date Submitted	Current Approval Status
RMP Group 2	2012-Apr-13	EPA/EEC approved with the exception of the proposed implementation schedule – 2014-Nov-18 Certified Letter No. 70121010000207596533 <u>First Material Modification to Consent Decree</u> filed 2015-Jul-9 approves June 2014 overall implementation schedule EPA/EEC full approval of the RMPs including the project implementation schedule dated Feb 2016 – 2016-Mar-18 Certified Letter No. 70151730000180442722
Deep Springs Pump Station Upgrade	2012-Apr-27 via quarterly report	N/A
Dixie Pump Station Upgrade	2012-Apr-27 via quarterly report	N/A
First Quarter 2012 Quarterly Report	2012-Apr-27	N/A
Appendix J-2 SEP Completion Report	2012-Jun-29	Under EPA/EEC Review
MS4 Permit Annual Report for Calendar Year 2011	2012-Jul-13	N/A
Second Quarter 2012 Quarterly Report	2012-Jul-20	N/A
Pump Station Operation Plan for Power Outages (third submittal)	2012-Sep-19	EPA/EEC approved – 2013-Oct-3 Certified Letter No. 70101670000225534553

Project/Program/Report Name	Date Submitted	Current Approval Status
RMP Group 3	2012-Oct-11	EPA/EEC approved with the exception of the proposed implementation schedule – 2014-Nov-18 Certified Letter No. 70121010000207596533 <u>First Material Modification to Consent Decree</u> filed 2015-Jul-9 approves June 2014 overall implementation schedule EPA/EEC full approval of the RMPs including the project implementation schedule dated Feb 2016 – 2016-Mar-18 Certified Letter No. 70151730000180442722
SORP – Implementation Commenced	2012-Oct-29 via quarterly report	N/A
Third Quarter 2012 Quarterly Report	2012-Oct-29	N/A
System Capacity Assurance Program (initial submittal)	2012-Dec-21	EPA/EEC comments – 2014-Feb-12 Certified Letter No. 70123460000308919960; LFUCG resubmitted
Appendix J-1 SEP Coldstream Park Greenway Plan	2012-Dec-21	No formal comments received from EPA/EEC
Fourth Quarter 2012 Quarterly Report	2013-Jan-29	N/A
2012 Annual Report	2013-Jan-30	N/A
First Quarter 2013 Quarterly Report	2013-Apr-29	N/A
MS4 Permit Annual Report for Calendar Year 2012	2013-Jul-12	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
Second Quarter 2013 Quarterly Report	2013-Jul-29	N/A
SORP 2013 Update	2013-Oct-14	Under EPA/EEC Review
Third Quarter 2013 Quarterly Report	2013-Oct-29	N/A
Fourth Quarter 2013 Quarterly Report	2014-Jan-29	N/A
2013 Annual Report	2014-Jan-30	N/A
RMP Revisions	2014-Mar-14	N/A
System Capacity Assurance Program (second submittal)	2014-Mar-14	EPA/EEC approved – 2014-Jul-3 Certified Letter No. 70101060000217039041
FOG Program – Implementation	2014-Apr-29 via quarterly report	N/A
GLPM Program – Implementation	2014-Apr-29 via quarterly report	N/A
First Quarter 2014 Quarterly Report	2014-Apr-29	N/A
MS4 Permit Annual Report for Calendar Year 2013	2014-Jul-14	N/A
Second Quarter 2014 Quarterly Report	2014-Jul-29	N/A
SORP 2014 Update	2014-Oct-14	Under EPA/EEC Review
RMP Project EH-13 East Lake Trunk Upsize	2014-Oct-29 via quarterly report	N/A
RMP Project WH-21 WWTP-5 Zone 1 Aeration	2014-Oct-29 via quarterly report	N/A
RMP Project WH-21 WWTP-6 Zone 2 Aeration, Phase 1	2014-Oct-29 via quarterly report	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
CAP – Implementation Commenced	2014-Oct-29 via quarterly report	N/A
CMOM – Development & Implementation	2014-Oct-29 via quarterly report	N/A
List of Future Authorized Connections	2014-Oct-29 via quarterly report	N/A
Blue Sky Pump Station/Force Main	2014-Oct-29 via quarterly report	N/A
Third Quarter 2014 Quarterly Report	2014-Oct-29	N/A
Appendix K-1 CEP Completion Report	2014-Dec-05	EEC confirmed CEP completion – 2016-Jul-21 Certified Letter No. 70123460000234676351
Appendix J-1 SEP Coldstream Park Greenway Plan Supplement	2014-Dec-31	No formal comments received from EPA/EEC
RMP Project EH-12 Century Hills Trunk Upsize	2015-Jan-29 via quarterly report	N/A
RMP Project NE-7 Expansion Area 2A Projects	2015-Jan-29 via quarterly report	N/A
RMP Project TB-11 WWTP-4 Final Clarifier Equipment, Phase 1	2015-Jan-29 via quarterly report	N/A
RMP Project WH-13 Idle Hour Trunk	2015-Jan-29 via quarterly report	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
RMP Project WH-21 WWTP-20 Odor Control Facilities, Phase 1	2015-Jan-29 via quarterly report	N/A
RMP Project WR-1 Wolf Run Main Trunk A	2015-Jan-29 via quarterly report	N/A
RMP Project WR-10 Bob O Link Trunk	2015-Jan-29 via quarterly report	N/A
RMP Project WR-11 Wolf Run Pump Station	2015-Jan-29 via quarterly report	N/A
List of Future Authorized Connections	2015-Jan-29 via quarterly report	N/A
Fourth Quarter 2014 Quarterly Report	2015-Jan-29	N/A
2014 Annual Report	2015-Jan-30	N/A
First Quarter 2015 Quarterly Report	2015-Apr-29	N/A
MS4 Permit Annual Report for Calendar Year 2014	2015-Jul-14	N/A
RMP Project TB-3 Tie-in Lower Cane Run Force Main	2015-Jul-29 via quarterly report	N/A
Second Quarter 2015 Quarterly Report	2015-Jul-29	N/A
Appendix J-1 SEP Coldstream Park Greenway Plan Update (Original Plan Combined with Supplement)	2015-Aug-12	EPA/EEC approved – 2015-Nov-25 Certified Letter No. 70142870000033182893
SORP 2015 Update	2015-Oct-14	Under EPA/EEC Review
Third Quarter 2015 Quarterly Report	2015-Oct-29	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
RMP Project WH-2 West Hickman Main Trunk A	2016-Jan-28 via quarterly report	N/A
RMP Project WH-16 Woodhill Trunk	2016-Jan-28 via quarterly report	N/A
Fourth Quarter 2015 Quarterly Report	2016-Jan-28	N/A
2015 Annual Report	2016-Jan-29	N/A
First Quarter 2016 Quarterly Report	2016-Apr-26	N/A
MS4 Permit Annual Report for Calendar Year 2015	2016-Jul-14	N/A
Second Quarter 2016 Quarterly Report	2016-Jul-28	N/A
SORP 2016 Update	2016-Oct-13	Under EPA/EEC Review
Third Quarter 2016 Quarterly Report	2016-Oct-27	N/A
PSOPPO – Implementation	2017-Jan-27 via quarterly report	N/A
RMP Project TB-1 Town Branch WWTP Wet Weather Storage Tank	2017-Jan-27 via quarterly report	N/A
RMP Project TB-5 UK Trunk B (Newtown Pike Extension)	2017-Jan-27 via quarterly report	N/A
RMP Project TB-11 WWTP-1 Headworks	2017-Jan-27 via quarterly report	N/A
RMP Project WR-8 Wolf Run Wet Weather Storage Tank	2017-Jan-27 via quarterly report	N/A
Fourth Quarter 2016 Quarterly Report	2017-Jan-27	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
2016 Annual Report	2017-Jan-30	N/A
RMP Project TB-11 WWTP-12 Dewatering	2017-Apr-27 via quarterly report	N/A
First Quarter 2017 Quarterly Report	2017-Apr-27	N/A
MS4 Permit Annual Report for Calendar Year 2016	2017-Jul-13	N/A
RMP Project TB-4 UK Trunk A	2017-Jul-27 via quarterly report	N/A
Second Quarter 2017 Quarterly Report	2017-Jul-27	N/A
SORP 2017 Update	2017-Oct-12	Under EPA/EEC Review
RMP Project CR-9 Lower Griffin Gate Trunk	2017-Oct-26 via quarterly report	N/A
Third Quarter 2017 Quarterly Report	2017-Oct-26	N/A
RMP Project CR-1 Lower Cane Run Wet Weather Storage Tank	2018-Jan-29 via quarterly report	N/A
RMP Project SE-1 South Elkhorn Pump Station Upsize	2018-Jan-29 via quarterly report	N/A
RMP Project WH-3 West Hickman Main Trunk B	2018-Jan-29 via quarterly report	N/A
RMP Project WH-4 West Hickman Main Trunk C	2018-Jan-29 via quarterly report	N/A
RMP Project WH-21 WWTP-6 Zone 2 Aeration, Phase 2	2018-Jan-29 via quarterly report	N/A

Project/Program/Report Name	Date Submitted	Current Approval Status
Fourth Quarter 2017 Quarterly Report	2018-Jan-29	N/A
2017 Annual Report	2018-Jan-30	N/A
First Quarter 2018 Quarterly Report	2018-Apr-27	N/A
MS4 Permit Annual Report for Calendar Year 2017	2018-Jul-12	N/A
Second Quarter 2018 Quarterly Report	2018-Jul-27	N/A
SORP 2018 Update	2018-Oct-10	Under EPA/EEC Review
Coldstream Park Stream Corridor Restoration and Preservation SEP	2018-Oct-29 via quarterly report	N/A
Third Quarter 2018 Quarterly Report	2018-Oct-29	N/A
Appendix J-1 SEP Completion Report	2018-Dec-10	Under EPA/EEC Review
RMP Project TB-11 WWTP-2 Primary Clarifier Equipment	2019-Jan-29 via quarterly report	N/A