Appendix A-1 Bypasses

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD

No Bypasses Occurred during the Reporting Period

Appendix A-2 Dry Weather CSOs

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD

No Dry Weather CSOs Occurred during the Reporting Period

Appendix A-3 Unauthorized Discharges

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	11603 SHELBYVILLE RD	10/28/2019 0:00	10/29/2019 0:00	1440	Sewer Main	00595	CATCH BASIN	MIDDLETOWN BRANCH	THERE WAS POSSIBLE DAMAGE BY OTHER UTILITY.	UTILITY DAMAGED MSD ASSET	DRY WEATHER DISCHARGE	3172279	WORK ORDER 3172287.	REFERRED FOR MAIN SEWER REPAIR.
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	10/31/2019 8:26	10/31/2019 12:14	2727	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY: HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3172781	NO CLEANUP REQUIRED, THE PIPE IS SUBMERGED AND DISCHARGES DIRECTLY TO STREAM.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	10/31/2019 9:30	10/31/2019 14:30	600000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY: HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3172790	NO CLEANUP REQUIRED, MANHOLE DISCHARGES DIRECTLY TO CREEK.	LOCATION INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	10/31/2019 10:55	10/31/2019 12:45	525	Sewer Manhole	28453	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY:HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3172793	CLEAN UP NOT REQUIRED, NO VISABLE SIGNS OF DEBRIS ON OR AROUND MANHOLE.	LOCATION INCLUDED IN THE IOAP.
CEDAR CREEK	KY0098540	10519 PROVIDENCE DR	11/5/2019 9:15	11/6/2019 9:34	5	Sewer Main	102886-V	GROUND	CEDAR CREEK	STRUCTURAL FAILURE IN FORCE MAIN.	STRUCTURAL FAILURE	RAIN EVENT DISCHARGE	3173359	MSD PERSONNEL TO CLEAN AFFECTED AREA.	CONTRACTOR REPAIRING FORCE MAIN.
DEREK R. GUTHRIE	KY0078956	3809 DIXIE HWY	11/9/2019 5:25	11/9/2019 5:30	100	Sewer Main	06940-AG	GROUND	MILL CREEK	STRUCTURAL FAILURE: FORCE MAIN BREAK.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3174624	WE SPREAD LIME.	PUMP STATION SHUT DOWN AND HAULED.
HITE CREEK	KY0022420	5504 TIMBER CREEK CT	11/25/2019 9:35	12/3/2019 15:20	98800	Sewer Main	117932-AG	GROUND	HARRODS CREEK	FORCEMAIN STRUCTURAL FAILURE.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3180984	MSD PERSONNEL TO CLEAN AFFECTED AREA OR CONTRACTOR.	CONTRACTOR TO REPAIR FORCEMAIN.
HITE CREEK	KY0022420	5500 HITT RD	11/26/2019 13:58	11/26/2019 17:37	6975	Sewer Treatment Plant	MSD0202	STREAM	HITE CREEK	CONTRACTOR HIT FORCE MAIN WHILE EXCAVATING.	UTILITY DAMAGED MSD ASSET	DRY WEATHER DISCHARGE	3181148	NO DEBRIS.	CONTRACTOR REPAIRED FORCE MAIN.
CEDAR CREEK	KY0098540	10801 FAIRMOUNT RD	11/26/2019 14:58	11/27/2019 16:21	30040	Sewer Main	78207	STREAM	CEDAR CREEK	STRUCTURAL FAILURE, FORCE MAIN BREAK.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3181130	PLACED BAILS OF STRAW TO CATCH DEBRIS, MSD PERSONNEL TO CLEAN AND DISINFECT FOLLOWING REPAIR.	CONTRACTOR TO REPAIR FORCE MAIN.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	11/30/2019 6:45	12/1/2019 23:30	7900000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181417	NO CLEANUP REQUIRED, MANHOLE IS DISCHARGING DIRECTLY INTO CREEK.	LOCATION INCLUDE IN IOAP.
MORRIS FORMAN	KY0022411	3406 DELL RD	11/30/2019 7:39	12/1/2019 7:35	28800	Sewer Manhole	28415	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181429	WO#3181637.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	11/30/2019 7:50	12/1/2019 7:50	158400	Sewer Manhole	28453	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181419	WO#3181632.	LOCATION INCLUDE IN IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	11/30/2019 7:52	12/1/2019 7:51	7200	Sewer Manhole	28452	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181421	WO#3181633.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3406 CHARLANE PKY	11/30/2019 8:02	12/1/2019 7:52	42900	Sewer Manhole	28451	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181426	WO#3181634.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	9707 WILLOWWOOD WAY	11/30/2019 8:10	12/1/2019 7:45	35375	Sewer Manhole	28336	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181428	WO#3181636.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3620 CHARLANE PKY	11/30/2019 8:15	12/1/2019 7:40	56200	Sewer Manhole	28340	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181427	WO#3181635.	LOCATION INCLUDED IN IOAP.

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	11/30/2019 8:56	12/1/2019 13:14	1612271	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181447	NO CLEANUP REQUIRED, MANHOLE IS DISCHARGING DIRECTLY INTO CREEK.	LOCATION IN IOAP.
DEREK R. GUTHRIE	KY0078956	9114 CINDERELLA LN	11/30/2019 9:45	11/30/2019 21:00	11550	Sewer Manhole	60679	DITCH	FISHPOOL CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181467	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
DEREK R. GUTHRIE	KY0078956	8800 ADMIRAL DR	11/30/2019 10:00	12/1/2019 3:48	53400	Sewer Manhole	93703	GROUND	PENNSYLVANIA RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181471	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
MORRIS FORMAN	KY0022411	8409 SABERDEE DR	11/30/2019 10:20	12/1/2019 0:14	13200	Sewer Manhole	43472	DITCH	GOOSE CREEK	LACK OF SYSTEM CAPACITY.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181416	MSD CLEAN AND SANITIZE AREA.	SITE FOUND DURING RAIN EVENT RECON.
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	11/30/2019 10:30	11/30/2019 15:30	6600	Sewer Manhole	26752	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181514	NO CLEANUP REQUIRED PIPE DISCHARGES DIRECTLY TO THE CREEK.	LOCATION INCLUDE IN IOAP.
DEREK R. GUTHRIE	KY0078956	9317 LANTANA DR	11/30/2019 10:30	11/30/2019 20:50	20400	Sewer Manhole	25484	STREAM	PENNSYLVANIA RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181473	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
MORRIS FORMAN	KY0022411	2408 GRAY FOX RD	11/30/2019 11:20	12/1/2019 5:30	135000	Sewer Manhole	27012	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181433	WO#3181641.	LOCATION INCLUDED IN IOAP.
FLOYDS FORK	KY0102784	815 TUCKER STATION RD	11/30/2019 11:25	11/30/2019 16:50	43000	Sewer Manhole	33003	STREAM	POPE LICK	LACK OF SEWER CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181450	NO CLEAN UP REQUIRED, SOLIDS & FLOATABLES WAS NOT DISCHARGED FROM THE MANHOLE.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	1011 ALTA CIR	11/30/2019 11:30	12/1/2019 5:45	360000	Sewer Manhole	45796	DITCH	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181435	WO#3181642.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	1700 SULGRAVE RD	11/30/2019 11:40	11/30/2019 19:30	36000	Sewer Manhole	72289	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181436	WO#3181643.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	4315 PRUITT CT	11/30/2019 12:22	12/1/2019 15:04	40000	Sewer Manhole	08426	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181443	WO#3181656.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	4313 PRUITT CT	11/30/2019 12:25	12/1/2019 15:08	320000	Sewer Manhole	08427	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181444	WO#3181657.	LOCATION INCLUDED IN IOAP.
HITE CREEK	KY0022420	7302 FLOYDSBURG RD	11/30/2019 12:30	12/1/2019 0:30	28800	Sewer Manhole	108953	DITCH	FLOYDS FORK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181457	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
MORRIS FORMAN	KY0022411	3506 CHARLANE PKY	11/30/2019 12:50	12/1/2019 7:55	34230	Sewer Manhole	28250	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181448	WO#3181638.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	4337 PRUITT CT	11/30/2019 12:55	12/1/2019 15:21	15900	Sewer Manhole	08429	GROUND	BUECHEL BRANCH	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181454	WO#3181659.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	4341 PRUITT CT	11/30/2019 12:59	12/1/2019 15:27	159000	Sewer Manhole	08430	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181455	WO#3181660.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	4332 PRUITT CT	11/30/2019 13:05	12/1/2019 15:30	79250	Sewer Service Line	085100290046A	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181453	WO#3181658.	LOCATION INCLUDED IN IOAP.

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
CEDAR CREEK	KY0098540	9719 COLLIER LN	11/30/2019 13:15	12/1/2019 0:15	12540	Sewer Manhole	98022	STREAM	CEDAR CREEK	LACK OF SYSTEM CAPACITY.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3182265	NO DEBRIS ON SITE.	LOCATION IN THE IOAP.
MORRIS FORMAN	KY0022411	4640 BARBOUR LN	11/30/2019 13:30	12/1/2019 0:36	66600	Sewer Manhole	65633	STREAM	LITTLE GOOSE CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181491	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
MORRIS FORMAN	KY0022411	202 OXMOOR LN	11/30/2019 13:35	12/1/2019 6:00	320000	Sewer Manhole	47583	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181504	WO#3181644.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	201 BULLITT LN	11/30/2019 13:35	12/1/2019 6:00	72000	Sewer Manhole	47582	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181505	WO#3181646.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3302 TROUT CREEK DR	11/30/2019 13:44	12/1/2019 15:18	109950	Sewer Manhole	23211	STREAM	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181477	WO#3181661.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	7900 SHELBYVILLE RD	11/30/2019 13:45	12/1/2019 6:05	19200	Sewer Manhole	02935	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181506	WO#3181647.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	7900 SHELBYVILLE RD	11/30/2019 13:50	12/1/2019 6:10	72000	Sewer Manhole	02933	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181507	WO#3181648	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	11/30/2019 13:55	12/1/2019 6:10	19200	Sewer Manhole	90700	CATCH BASIN	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181508	WO#3181651.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	11/30/2019 14:05	12/1/2019 6:15	96000	Sewer Manhole	47593	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181511	WO#3181655.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3305 INDIAN CREEK CT	11/30/2019 14:10	12/1/2019 14:13	36000	Sewer Manhole	51160	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181478	WO#3181662.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	7913 SHELBYVILLE RD	11/30/2019 14:25	12/1/2019 6:15	72000	Sewer Manhole	84155	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181510	WO#3181654.	LOCATION INCLUDED IN IOAP.
CEDAR CREEK	KY0098540	5410 SPRIGWOOD LN	11/30/2019 16:35	11/30/2019 18:25	15	Sewer Manhole	28984	GROUND	CEDAR CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181522	OPERATION DISCLN	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP
CEDAR CREEK	KY0098540	5600 HOFELICH CT	11/30/2019 16:40	11/30/2019 18:20	15	Sewer Manhole	28998	GROUND	CEDAR CREEK	LACK OF SYSTEM CAPACITY- HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181517	WO # 3181528	A SOLUTION FOR THIS IS INCLUDED IN THE IOAP.
MORRIS FORMAN	KY0022411	2001 TERRIL LN	11/30/2019 16:50	12/1/2019 14:17	32175	Sewer Manhole	23212	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181515	WO#3181663.	LOCATION INCLUDED IN IOAP.
CEDAR CREEK	KY0098540	10800 FAIRMOUNT RD	12/1/2019 10:45	12/2/2019 8:00	129000	Sewer Manhole	97365	GROUND	BIG RUN	CAUSED DUE TO REPAIR ON FORCE MAIN AND LIMITED CAPACITY OF PUMP STATION.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3181606	WO#3182298.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	9420 BLOSSOM LN	12/2/2019 18:47	12/2/2019 18:51	30	Sewer Service Line	HP10884619	CATCH BASIN	LITTLE GOOSE CREEK	HEAVY PAPER.	OBSTRUCTION-NOT GREASE / ROOTS	DRY WEATHER DISCHARGE	3182413	NO CLEAN REQUIRED NO SOLIDS DRAINING INTO PRIVATE BASIN.	FLUSHED MAIN SEWER.
HITE CREEK	KY0022420	5504 TIMBER CREEK CT	12/11/2019 6:10	12/12/2019 12:15	600000	Sewer Main	117932-AG	GROUND	HARRODS CREEK	ADDITIONAL STRUCTURAL FAILURE OF FORCE MAIN AT CONSTRUCTION SITE/DISDW #3180984.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3185089	EXISTING CONTRUCTION AREA/ DISDW #3180984.	FORCE MAIN REPAIR IN PROGRESS/ DISDW #3180984.
HITE CREEK	KY0022420	6596 KEN CARLA DR	12/11/2019 8:48	12/11/2019 15:50	150000	Sewer Lift Station	MSD1215-PS	STREAM	HARRODS CREEK	STRUCTURAL FAILURE OF FORCE MAIN AT CONSTRUCTION SITE/DISDW #3180984.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3185106	CONTRACTOR TO CLEAN AND SANITIZE AFFECTED AREA.	FORCE MAIN REPAIR DISDW #3180984.
HITE CREEK	KY0022420	6618 DEL HAVEN AVE	12/11/2019 15:20	12/12/2019 15:50	300000	Sewer Manhole	117936	STREAM	HARRODS CREEK	STRUCTURAL FAILURE FORCE MAIN BREAK.	STRUCTURAL FAILURE	DRY WEATHER DISCHARGE	3185202	LIME AND STRAW WAS APPLIED.	MAC CONSTRUCTED A SETTLING POND TO PUMP INTO FOR TEMP STORAGE.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	12/16/2019 18:00	12/17/2019 13:45	1700000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3186627	CLEAN-UP NOT REQUIRED, MANHOLE DISCHARGE DIRECTLY INTO THE CREEK.	LOCATION IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	9317 LANTANA DR	12/16/2019 19:01	12/16/2019 21:10	129	Sewer Manhole	25484	STREAM	PENNSYLVANIA RUN	LACK OF SYSTEM CAPACITY DUE TO HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3186622	MSD CLEANED AND SANITZED IMPACTED AREA.	RAIN STOPPED ALLOWING STATION TO RECOVER.

ASSOCIATED WQTC NAME	ASSOCIATED WQTC KPDES#	OVERFLOW LOCATION	OVERFLOW START DATE & TIME	OVERFLOW STOP DATE & TIME	VOLUME OF OVERFLOW (GAL)	SOURCE ASSET TYPE	SOURCE ASSET ID	SOURCE ASSET DISCHARGES TO	RECEIVING STREAM	CAUSE OF OVERFLOW	DUE TO	WEATHER	WO #	CLEANUP EFFORTS BY MSD	REPAIR EFFORTS BY MSD
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	12/17/2019 0:01	12/17/2019 1:17	6700	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3187889	NO CLEAN UP PERFORMED – PIPE DISCHARGING UNDERWATER, DIRECTLY INTO STREAM	INVESTIGATION INDICATED THAT ADDITIONAL REPAIRS WERE NOT REQUIRED BY MSD
DEREK R. GUTHRIE	KY0078956	7201 FEGENBUSH LN	12/24/2019 20:02	12/25/2019 14:54	1080	Sewer Service Line	BW01857479			HEAVY SLUDE AND PAPER IN MSD'S PORTION OF THE PROPERTY SERVICE LINE	OBSTRUCTION-NOT GREASE / ROOTS	DRY WEATHER DISCHARGE	3188394	CUSTOMER CLEANED IMPACTED AREA	CAMERA WAS ABLE TO REMOVE PAPER AND SLUDGE...NOT DIGGING NEEDED
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	12/29/2019 18:15	12/30/2019 10:55	25000	Sewer Manhole	28453	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190126	WO#3190236.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	1201 OLD CANNONS LN	12/29/2019 20:30	12/30/2019 17:45	23000000	Sewer Manhole	IS021A-SI	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OFSYSTEM CAPACITY HEAVY RAIN	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190135	CLEANU NOT REQUIRED, PIPE DISCHARGES UNDERGROUND INTO THE CREEK	LOCATION IS INCLUDED IN IOAP
DEREK R. GUTHRIE	KY0078956	9317 LANTANA DR	12/29/2019 21:54	12/30/2019 2:00	7650	Sewer Manhole	25484	STREAM	PENNSYLVANIA RUN	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190153	NONE POSSIBLE DUE TO MAGNITUDE OF STORM	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	12/29/2019 21:56	12/30/2019 4:30	100000	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OFSYSTEM CAPACITY HEAVY RAIN	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190134	CLEANUP NOT REQUIRED, PIPE DISCHARGES UNDERGROUND INTO THE CREEK	LOCATION IS INCLUDED IN IOAP
MORRIS FORMAN	KY0022411	3406 DELL RD	12/29/2019 22:35	12/30/2019 6:41	12150	Sewer Manhole	28415	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190198	WO#3190197.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3402 CHARLANE PKY	12/29/2019 22:47	12/30/2019 6:45	11950	Sewer Manhole	28452	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190206	WO#3190201.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3406 CHARLANE PKY	12/29/2019 22:52	12/30/2019 6:49	11950	Sewer Manhole	28451	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190208	WO#3190207.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	9707 WILLOWWOOD WAY	12/29/2019 23:15	12/30/2019 11:00	17625	Sewer Manhole	28336	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190212	WO #3190211.	LOCATION INCLUDED IN IOAP.
MORRIS FORMAN	KY0022411	3620 CHARLANE PKY	12/29/2019 23:20	12/30/2019 6:55	11375	Sewer Manhole	28340	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190210	WO #3190209.	LOCATION INCLUDED IN IOAP.
DEREK R. GUTHRIE	KY0078956	9114 CINDERELLA LN	12/29/2019 23:30	12/30/2019 4:30	7500	Sewer Manhole	60679	DITCH	FISHPOOL CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN.	LACK OF SYSTEM CAPACITY	RAIN EVENT DISCHARGE	3190152	NONE POSSIBLE DUE TO MAGNITUDE OF STORM.	SITE FOUND DURING RAIN EVENT RECON - WILL BE MONITORED AND EVALUATED FOR REPAIR.
DEREK R. GUTHRIE	KY0078956	4005 KIRBY LN	12/30/2019 13:08	12/30/2019 14:30	2460	Sewer Manhole	61266	DITCH	FERN CREEK	MECHANICAL FAILURE, PUMPS AIRLOCKED.	MECHANICAL FAILURE	RAIN EVENT DISCHARGE	3190259	DEBRIS RAKED, BAGGED AND HAULED OFF WO # 3190326.	REPLACED THE FAULTY FLOAT SWITCH THAT CAUSED THE PUMPS TO AIRLOCK WO # 3190322.

Appendix B CSO Flow Monitoring Data

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO015	10/6/2019 15:45	10/6/2019 18:30	165	0	2,003,916	0	0	24	Atlas	(blank)	1,983,877	1
	10/15/2019 23:15	10/16/2019 2:15	180	0	17,181,229	0	0	3	Atlas	(blank)	4,810,744	1
	10/26/2019 6:00	10/26/2019 6:30	30	1	2,129,397	0	1	6	Atlas	(blank)	2,938,568	1
	10/30/2019 14:15	10/30/2019 14:30	15	0	1,104,418	2	0	3	Atlas	(blank)	684,739	1
	11/27/2019 0:45	11/27/2019 2:15	90	1	5,262,005	2	0	6	Atlas	(blank)	5,577,725	1
	11/30/2019 4:15	11/30/2019 6:00	105	2	11,921,605	2	1	12	Atlas	(blank)	28,611,853	1
CSO015 Total											44,607,506	6
CSO019	10/6/2019 7:30	10/6/2019 7:30	0	0	187,070	0	0	6	Atlas	(blank)	18,707	1
	10/6/2019 17:30	10/7/2019 9:15	945	0	603,044	0	0	24	Atlas	(blank)	428,161	1
	10/11/2019 10:45	10/11/2019 12:45	120	0	213,456	1	0	3	Atlas	(blank)	68,306	1
	10/11/2019 21:15	10/11/2019 23:15	120	0	128,656	1	0	3	Atlas	(blank)	41,170	1
	10/15/2019 22:30	10/16/2019 7:45	555	0	693,519	0	0	1	Atlas	(blank)	291,278	1
	10/26/2019 4:15	10/26/2019 23:15	1140	1	3,002,723	2	1	24	Atlas	(blank)	4,173,785	1
	10/30/2019 11:15	10/31/2019 15:45	1710	0	3,766,061	3	0	3	Atlas	(blank)	2,221,976	1
	11/5/2019 9:30	11/5/2019 10:30	60	0	103,723	1	0	3	Atlas	(blank)	13,484	1
	11/7/2019 4:00	11/7/2019 16:30	750	0	372,578	1	0	24	Atlas	(blank)	242,176	1
	11/11/2019 19:00	11/12/2019 1:00	360	0	431,352	1	0	12	Atlas	(blank)	107,838	1
	11/19/2019 15:45	11/19/2019 17:45	120	0	318,830	0	0	6	Atlas	(blank)	31,883	
	11/22/2019 2:15	11/22/2019 10:00	465	0	615,559	0	0	6	Atlas	(blank)	196,979	1
	11/23/2019 9:15	11/23/2019 17:00	465	0	496,270	0	0	3	Atlas	(blank)	99,254	1
	11/26/2019 20:15	11/27/2019 18:45	1350	0	1,261,403	1	0	6	Atlas	(blank)	946,052	1
	11/30/2019 2:30	12/1/2019 8:45	1815	2	3,953,379	3	1	12	Atlas	(blank)	8,736,968	1
	12/2/2019 1:30	12/2/2019 4:45	195	0	598,410	3	0	12	Atlas	(blank)	59,841	1
	12/6/2019 10:45	12/6/2019 10:45	0	0	56,657	2	0	6	Atlas	(blank)	3,966	1
	12/9/2019 3:30	12/9/2019 20:15	1005	0	313,642	0	0	24	Atlas	(blank)	59,592	1
	12/13/2019 16:45	12/14/2019 10:45	1080	0	629,653	0	0	12	Atlas	(blank)	371,495	1
	12/15/2019 22:45	12/17/2019 12:45	2280	0	7,566,007	2	0	6	Atlas	(blank)	1,059,241	1
	12/29/2019 5:30	12/30/2019 15:00	2010	1	1,230,536	1	1	24	Atlas	(blank)	1,759,667	1
CSO019 Total											20,931,819	20
CSO022	10/30/2019 14:15	10/30/2019 14:30	15	0	385,697	2	0	3	Atlas	(blank)	300,844	1
CSO022 Total											300,844	1
CSO034	12/16/2019 17:15	12/16/2019 17:30	15	0	1,341	1	0	6	Atlas	(blank)	979	1
CSO034 Total											979	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO036	10/30/2019 14:30	10/30/2019 14:45	15	0	30,910	2	0	3	Atlas	(blank)	25,964	1
CSO036 Total											25,964	1
CSO050	10/6/2019 14:45	10/6/2019 20:00	315	0	167,301	0	0	24	Atlas	(blank)	143,879	1
	10/7/2019 6:30	10/7/2019 6:30	0	0	1,642	0	0	24	Atlas	(blank)	1,412	1
	10/11/2019 10:30	10/11/2019 11:15	45	0	98,723	1	0	1	Atlas	(blank)	29,617	1
	10/11/2019 21:45	10/11/2019 21:45	0	0	14,283	1	0	1	Atlas	(blank)	4,285	1
	10/15/2019 22:30	10/15/2019 23:45	75	0	181,233	0	0	1	Atlas	(blank)	54,370	1
	10/26/2019 5:00	10/26/2019 19:30	870	1	602,238	2	1	6	Atlas	(blank)	849,155	1
	10/30/2019 12:30	10/30/2019 17:45	315	0	905,761	2	0	3	Atlas	(blank)	597,802	1
	10/31/2019 4:00	10/31/2019 11:00	420	0	1,014,281	3	0	6	Atlas	(blank)	588,283	1
	11/7/2019 7:00	11/7/2019 10:00	180	0	50,126	0	0	24	Atlas	(blank)	34,086	1
	11/22/2019 2:45	11/22/2019 6:45	240	0	143,066	0	0	6	Atlas	(blank)	50,073	1
	11/23/2019 9:00	11/23/2019 9:15	15	0	48,837	0	0	3	Atlas	(blank)	9,279	1
	11/26/2019 20:00	11/27/2019 6:45	645	0	577,568	1	0	6	Atlas	(blank)	485,157	1
	11/30/2019 2:00	11/30/2019 21:45	1185	2	1,196,144	3	1	12	Atlas	(blank)	2,751,131	1
	12/9/2019 2:45	12/9/2019 2:45	0	0	3,362	0	0	1	Atlas	(blank)	706	1
	12/9/2019 20:00	12/9/2019 20:15	15	0	41,010	0	0	1	Atlas	(blank)	8,612	1
	12/13/2019 18:45	12/14/2019 1:45	420	0	21,752	0	0	12	Atlas	(blank)	13,051	1
	12/16/2019 0:00	12/16/2019 1:45	105	0	52,586	0	0	6	Atlas	(blank)	7,362	1
	12/16/2019 13:30	12/17/2019 0:00	630	0	465,393	2	0	6	Atlas	(blank)	386,276	1
	12/29/2019 5:30	12/30/2019 3:30	1320	1	654,235	1	0	24	Atlas	(blank)	791,624	1
CSO050 Total											6,806,160	19
CSO051	10/26/2019 5:45	10/26/2019 9:15	210	1	17,782	1	1	6	Atlas	(blank)	25,072	1
	10/30/2019 12:30	10/30/2019 16:00	210	0	25,215	2	0	3	Atlas	(blank)	16,642	1
	10/31/2019 6:15	10/31/2019 9:15	180	0	25,755	3	0	6	Atlas	(blank)	14,938	1
	11/26/2019 21:30	11/27/2019 0:15	165	0	5,223	1	0	6	Atlas	(blank)	4,387	1
	11/30/2019 5:00	11/30/2019 16:30	690	2	34,228	3	1	12	Atlas	(blank)	78,725	1
	12/16/2019 17:30	12/16/2019 18:15	45	0	13,145	1	0	6	Atlas	(blank)	10,910	1
	12/29/2019 19:30	12/29/2019 22:15	165	1	34,723	1	0	24	Atlas	(blank)	42,015	1
CSO051 Total											192,689	7
CSO054	10/26/2019 7:30	10/26/2019 9:15	105	1	20,759	1	1	6	Atlas	(blank)	29,270	1
	10/30/2019 15:00	10/30/2019 15:30	30	0	22,887	2	0	3	Atlas	(blank)	16,021	1
	10/31/2019 7:15	10/31/2019 9:00	105	0	60,556	3	0	6	Atlas	(blank)	37,545	1
	11/30/2019 5:00	11/30/2019 16:30	690	2	87,091	3	1	12	Atlas	(blank)	201,180	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	12/16/2019 17:45	12/16/2019 18:00	15	0	12,019	1	0	6	Atlas	(blank)	9,495	1
	12/29/2019 20:00	12/29/2019 22:15	135	1	167,167	1	0	24	Atlas	(blank)	188,899	1
CSO054 Total											482,410	6
CSO055	10/11/2019 10:45	10/11/2019 10:45	0	0	1,778	1	0	1	Atlas	(blank)	569	1
	10/15/2019 22:30	10/15/2019 22:30	0	0	3,578	0	0	1	Atlas	(blank)	1,288	1
	10/26/2019 6:00	10/26/2019 10:00	240	1	35,369	1	1	6	Atlas	(blank)	49,870	1
	10/26/2019 19:30	10/26/2019 19:30	0	1	37	2	1	6	Atlas	(blank)	52	1
	10/30/2019 14:45	10/30/2019 18:00	195	0	250,899	2	0	3	Atlas	(blank)	175,629	1
	10/31/2019 6:30	10/31/2019 10:45	255	0	809,898	3	0	6	Atlas	(blank)	502,137	1
	11/30/2019 3:00	11/30/2019 5:00	120	2	100	2	1	12	Atlas	(blank)	232	1
	11/30/2019 13:45	11/30/2019 16:15	150	2	28,287	3	1	12	Atlas	(blank)	65,343	1
	12/16/2019 21:45	12/16/2019 22:00	15	0	927	1	0	6	Atlas	(blank)	732	1
	12/29/2019 14:15	12/30/2019 2:30	735	1	544,021	1	0	24	Atlas	(blank)	614,744	1
CSO055 Total											1,410,596	10
CSO056	10/26/2019 7:30	10/26/2019 9:00	90	1	3,658	1	1	6	Atlas	(blank)	5,158	1
	10/30/2019 14:30	10/30/2019 14:30	0	0	52,806	2	0	3	Atlas	(blank)	36,964	1
	11/27/2019 0:30	11/27/2019 0:30	0	0	6,922	1	0	6	Atlas	(blank)	5,122	1
	11/30/2019 5:15	11/30/2019 12:15	420	2	6,900	3	1	12	Atlas	(blank)	15,940	1
	12/29/2019 20:30	12/29/2019 21:15	45	1	13,723	1	0	24	Atlas	(blank)	15,507	1
	12/30/2019 7:30	12/30/2019 11:00	210	1	373	1	0	24	Atlas	(blank)	421	1
CSO056 Total											79,112	6
CSO057	10/15/2019 22:30	10/15/2019 22:30	0	0	619	0	0	1	Atlas	(blank)	229	1
	10/26/2019 7:15	10/26/2019 7:15	0	1	292	0	1	24	Atlas	(blank)	423	1
	11/19/2019 16:00	11/19/2019 16:30	30	0	810	0	0	6	Atlas	(blank)	81	
	12/9/2019 20:00	12/9/2019 20:00	0	0	6,826	0	0	1	Atlas	(blank)	1,297	1
CSO057 Total											2,030	3
CSO062	10/6/2019 17:45	10/6/2019 20:15	150	0	448,719	0	0	24	Atlas	(blank)	421,796	1
	10/16/2019 0:00	10/16/2019 0:30	30	0	101,736	0	0	1	Atlas	(blank)	42,729	1
	10/26/2019 6:00	10/26/2019 10:15	255	1	472,840	1	0	24	Atlas	(blank)	600,507	1
	10/30/2019 14:30	10/30/2019 16:45	135	0	1,190,085	2	0	3	Atlas	(blank)	952,068	1
	10/31/2019 6:45	10/31/2019 10:15	210	0	1,247,469	3	0	6	Atlas	(blank)	873,228	1
	11/26/2019 22:15	11/27/2019 8:30	615	0	6,209,822	1	0	12	Atlas	(blank)	3,912,188	1
	11/30/2019 3:45	11/30/2019 23:45	1200	2	7,838,548	3	1	12	Atlas	(blank)	14,893,241	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	12/29/2019 14:00	12/29/2019 23:45	585	1	1,371,955	1	0	24	Atlas	(blank)	1,509,150	1
CSO062 Total											23,204,907	8
CSO082	10/30/2019 14:15	10/30/2019 15:00	45	0	42,505	2	0	3	Atlas	(blank)	32,729	1
	11/27/2019 0:00	11/27/2019 1:45	105	0	63,965	1	0	12	Atlas	(blank)	38,379	1
	11/30/2019 4:15	11/30/2019 17:45	810	2	420,245	3	1	12	Atlas	(blank)	811,073	1
	12/16/2019 15:45	12/16/2019 20:00	255	0	407,909	1	0	6	Atlas	(blank)	281,457	1
CSO082 Total											1,163,638	4
CSO083	10/30/2019 14:15	10/30/2019 14:15	0	0	4,146	2	0	3	Atlas	(blank)	3,524	1
CSO083 Total											3,524	1
CSO084	10/6/2019 14:45	10/6/2019 20:00	315	0	60,289	0	0	6	Atlas	(blank)	59,083	1
	10/15/2019 22:45	10/15/2019 23:00	15	0	117,287	0	0	1	Atlas	(blank)	60,989	1
	10/26/2019 5:30	10/26/2019 9:00	210	1	173,203	1	0	24	Atlas	(blank)	221,700	1
	10/30/2019 14:15	10/30/2019 15:15	60	0	318,435	2	0	3	Atlas	(blank)	270,670	1
	10/31/2019 6:30	10/31/2019 7:45	75	0	224,454	3	0	6	Atlas	(blank)	145,895	1
	11/26/2019 21:45	11/27/2019 1:00	195	0	192,652	1	0	12	Atlas	(blank)	121,371	1
	11/30/2019 3:15	11/30/2019 16:30	795	2	289,160	3	1	12	Atlas	(blank)	546,512	1
	12/9/2019 20:30	12/9/2019 20:30	0	0	10,448	0	0	1	Atlas	(blank)	2,194	1
	12/16/2019 17:15	12/16/2019 18:30	75	0	214,810	1	0	6	Atlas	(blank)	148,219	1
	12/29/2019 20:15	12/29/2019 21:15	60	1	110,463	1	0	24	Atlas	(blank)	122,614	1
CSO084 Total											1,699,247	10
CSO092	10/30/2019 14:15	10/30/2019 14:15	0	0	67	2	0	3	Atlas	(blank)	56	1
CSO092 Total											56	1
CSO093	12/16/2019 13:45	12/16/2019 13:45	0	0	975	0	0	6	Atlas	(blank)	653	1
CSO093 Total											653	1
CSO097	10/6/2019 14:45	10/6/2019 20:00	315	1	29,420	1	1	6	Atlas	(blank)	35,304	1
	10/15/2019 22:30	10/16/2019 0:00	90	0	94,259	1	1	1	Atlas	(blank)	68,809	1
	10/26/2019 5:15	10/26/2019 8:45	210	1	57,351	1	0	24	Atlas	(blank)	71,115	1
	10/26/2019 19:30	10/26/2019 19:30	0	1	118	1	0	24	Atlas	(blank)	146	1
	10/30/2019 13:45	10/30/2019 16:15	150	0	358,352	2	0	3	Atlas	(blank)	293,849	1
	10/31/2019 6:15	10/31/2019 8:30	135	0	279,112	3	0	6	Atlas	(blank)	192,587	1
	11/26/2019 21:45	11/27/2019 1:00	195	0	72,429	1	0	12	Atlas	(blank)	57,943	1
	11/30/2019 2:45	11/30/2019 22:30	1185	2	808,010	3	1	12	Atlas	(blank)	1,478,658	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO097 Total											2,198,411	8
CSO104	10/6/2019 18:45	10/26/2019 21:45	28980	0	323,082	3	0	3	Atlas	(blank)	268,158	1
	10/30/2019 14:45	10/31/2019 11:30	1245	0	155,118	3	0	3	Atlas	(blank)	105,480	1
	11/7/2019 10:00	11/11/2019 9:45	5745	0	26,215	0	0	24	Atlas	(blank)	19,137	1
	12/14/2019 5:15	12/14/2019 7:00	105	0	1,158	0	0	12	Atlas	(blank)	556	1
	12/16/2019 16:45	12/16/2019 23:30	405	1	15,045	2	0	6	Atlas	(blank)	15,797	1
	12/29/2019 17:00	12/30/2019 3:30	630	2	155,465	1	1	24	Atlas	(blank)	234,752	1
CSO104 Total											643,880	6
CSO108	11/30/2019 11:30	11/30/2019 23:45	735	2	712	3	1	24	Atlas	(blank)	1,481	1
	12/29/2019 1:45	12/30/2019 9:30	1905	2	265	2	1	12	Atlas	(blank)	416	1
CSO108 Total											1,897	2
CSO109	10/15/2019 22:45	10/15/2019 22:45	0	0	67,760	0	1	1	Atlas	(blank)	54,886	1
	10/30/2019 14:15	10/30/2019 14:45	30	0	70,726	2	0	3	Atlas	(blank)	62,239	1
CSO109 Total											117,125	2
CSO110	10/6/2019 14:45	10/6/2019 15:00	15	1	19,326	0	0	6	Atlas	(blank)	22,612	1
	10/15/2019 22:45	10/15/2019 23:00	15	0	32,466	0	0	1	Atlas	(blank)	20,778	1
	10/26/2019 5:45	10/26/2019 9:00	195	1	22,638	1	0	24	Atlas	(blank)	26,939	1
	10/30/2019 14:15	10/30/2019 15:15	60	0	147,170	2	0	3	Atlas	(blank)	123,623	1
	10/31/2019 6:45	10/31/2019 7:30	45	0	49,452	3	0	6	Atlas	(blank)	32,144	1
	11/27/2019 0:30	11/27/2019 0:45	15	0	31,542	1	0	12	Atlas	(blank)	21,764	1
	11/30/2019 4:45	11/30/2019 16:30	705	2	93,574	3	1	12	Atlas	(blank)	181,533	1
	12/16/2019 17:30	12/16/2019 18:30	60	0	37,386	1	0	6	Atlas	(blank)	28,787	1
	12/29/2019 20:30	12/29/2019 21:00	30	1	16,970	1	0	24	Atlas	(blank)	22,570	1
CSO110 Total											480,750	9
CSO111	10/26/2019 7:15	10/26/2019 7:15	0	1	4,077	0	0	24	Atlas	(blank)	4,852	1
	10/31/2019 6:30	10/31/2019 6:45	15	0	8,948	2	0	6	Atlas	(blank)	5,816	1
	11/30/2019 10:30	11/30/2019 16:30	360	2	27,466	3	1	12	Atlas	(blank)	53,284	1
CSO111 Total											63,952	3
CSO113	10/30/2019 14:15	10/30/2019 14:45	30	0	24,858	2	0	3	Atlas	(blank)	20,632	1
CSO113 Total											20,632	1
CSO117	10/31/2019 7:30	10/31/2019 9:00	90	0	590,502	3	0	6	Atlas	(blank)	389,731	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	11/30/2019 8:00	11/30/2019 23:00	900	2	3,212,172	3	1	12	Atlas	(blank)	6,713,440	1
CSO117 Total											7,103,171	2
CSO118	10/6/2019 17:30	10/6/2019 20:15	165	0	1,088,522	0	0	6	Atlas	(blank)	1,066,752	1
	10/11/2019 11:00	10/11/2019 11:45	45	0	461,097	1	0	1	Atlas	(blank)	175,217	1
	10/15/2019 22:45	10/16/2019 0:15	90	0	1,463,577	0	0	1	Atlas	(blank)	761,060	1
	10/26/2019 5:30	10/26/2019 9:45	255	1	1,694,827	1	0	24	Atlas	(blank)	2,169,379	1
	10/26/2019 19:30	10/26/2019 20:15	45	1	260,755	1	0	24	Atlas	(blank)	333,766	1
	10/30/2019 14:15	10/30/2019 15:45	90	0	2,808,906	2	0	3	Atlas	(blank)	2,387,570	1
	10/31/2019 6:00	10/31/2019 8:30	150	0	2,402,232	3	0	6	Atlas	(blank)	1,561,451	1
	11/7/2019 8:00	11/7/2019 10:30	150	0	91,318	0	0	24	Atlas	(blank)	61,183	1
	11/22/2019 6:00	11/22/2019 7:00	60	0	344,888	0	0	6	Atlas	(blank)	117,262	1
	11/26/2019 21:45	11/27/2019 5:45	480	0	2,599,668	1	0	12	Atlas	(blank)	1,637,791	1
	11/30/2019 3:00	11/30/2019 17:30	870	2	4,434,533	3	1	12	Atlas	(blank)	8,381,267	1
	12/9/2019 20:30	12/9/2019 20:45	15	0	178,890	0	0	1	Atlas	(blank)	37,567	1
	12/16/2019 14:30	12/16/2019 19:30	300	0	2,181,588	1	0	6	Atlas	(blank)	1,505,296	1
	12/29/2019 13:30	12/30/2019 1:45	735	1	1,617,347	1	0	24	Atlas	(blank)	1,795,255	1
CSO118 Total											21,990,816	14
CSO119	10/6/2019 14:45	10/6/2019 20:00	315	0	324,532	0	0	6	Atlas	(blank)	318,041	1
	10/15/2019 22:30	10/15/2019 23:30	60	0	258,438	0	0	1	Atlas	(blank)	134,388	1
	10/26/2019 5:15	10/26/2019 9:00	225	1	301,453	1	0	24	Atlas	(blank)	385,860	1
	10/26/2019 19:15	10/26/2019 19:30	15	1	35,341	1	0	24	Atlas	(blank)	45,236	1
	10/30/2019 14:00	10/30/2019 15:15	75	0	341,806	2	0	3	Atlas	(blank)	290,535	1
	10/31/2019 6:00	10/31/2019 8:00	120	0	454,920	3	0	6	Atlas	(blank)	295,698	1
	11/26/2019 21:30	11/27/2019 1:00	210	0	419,106	1	0	12	Atlas	(blank)	264,037	1
	11/30/2019 2:45	11/30/2019 16:45	840	2	770,820	3	1	12	Atlas	(blank)	1,456,850	1
	12/9/2019 20:15	12/9/2019 20:15	0	0	54,329	0	0	1	Atlas	(blank)	11,409	1
	12/16/2019 14:15	12/16/2019 18:45	270	0	519,265	1	0	6	Atlas	(blank)	358,293	1
	12/29/2019 13:15	12/29/2019 22:00	525	1	235,814	1	0	24	Atlas	(blank)	261,753	1
CSO119 Total											3,822,100	11
CSO125	10/6/2019 15:00	10/6/2019 20:15	315	1	113,264	0	0	6	Atlas	(blank)	123,458	1
	10/15/2019 22:45	10/15/2019 23:00	15	0	214,369	0	0	1	Atlas	(blank)	90,035	1
	10/26/2019 5:30	10/26/2019 9:15	225	1	181,456	1	0	6	Atlas	(blank)	221,376	1
	10/26/2019 19:45	10/26/2019 20:00	15	1	21,532	1	0	6	Atlas	(blank)	26,269	1
	10/30/2019 13:15	10/30/2019 20:30	435	0	443,400	2	0	3	Atlas	(blank)	403,494	1

msd Safe, clean waterways

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	10/31/2019 6:15	10/31/2019 11:30	315	0	371,731	3	0	6	Atlas	(blank)	260,212	1
	11/22/2019 6:15	11/22/2019 6:15	0	0	7,426	0	0	6	Atlas	(blank)	2,599	1
	11/23/2019 23:15	11/24/2019 0:00	45	0	250	0	0	3	Atlas	(blank)	50	
	11/26/2019 22:00	11/27/2019 5:30	450	0	243,911	1	0	12	Atlas	(blank)	195,129	1
	11/30/2019 3:00	11/30/2019 21:00	1080	2	985,581	3	1	24	Atlas	(blank)	1,527,651	1
	12/9/2019 20:30	12/9/2019 20:45	15	0	76,357	0	0	24	Atlas	(blank)	21,380	1
	12/16/2019 14:30	12/16/2019 19:30	300	0	542,493	1	0	6	Atlas	(blank)	379,745	1
	12/29/2019 10:00	12/30/2019 1:45	945	1	299,399	1	0	24	Atlas	(blank)	395,207	1
CSO125 Total											3,646,605	12
CSO126	10/30/2019 14:15	10/30/2019 15:00	45	0	33,984	2	0	3	Atlas	(blank)	30,925	1
	10/31/2019 6:45	10/31/2019 6:45	0	0	443	3	0	6	Atlas	(blank)	310	1
	11/27/2019 0:30	11/27/2019 0:30	0	0	268	1	0	12	Atlas	(blank)	214	1
	11/30/2019 5:15	11/30/2019 18:45	810	2	23,759	3	1	24	Atlas	(blank)	36,827	1
	12/16/2019 17:45	12/16/2019 19:30	105	0	22,811	1	0	6	Atlas	(blank)	15,968	1
	12/29/2019 21:00	12/29/2019 21:00	0	1	913	1	0	24	Atlas	(blank)	1,205	1
CSO126 Total											85,449	6
CSO127	10/6/2019 14:45	10/6/2019 23:15	510	1	101,627	1	0	6	Atlas	(blank)	113,822	1
	10/11/2019 11:15	10/11/2019 12:00	45	0	51,989	1	0	12	Atlas	(blank)	19,236	1
	10/15/2019 22:45	10/16/2019 0:00	75	0	311,684	0	0	1	Atlas	(blank)	155,842	1
	10/26/2019 5:15	10/26/2019 9:30	255	1	87,099	1	0	24	Atlas	(blank)	105,390	1
	10/26/2019 18:45	10/26/2019 20:15	90	1	23,999	1	0	24	Atlas	(blank)	29,039	1
	11/22/2019 4:45	11/22/2019 7:00	135	0	42,419	0	0	6	Atlas	(blank)	15,695	1
	11/26/2019 21:45	11/27/2019 6:00	495	0	136,357	1	0	12	Atlas	(blank)	110,449	1
	11/30/2019 2:30	11/30/2019 21:00	1110	2	302,495	3	1	24	Atlas	(blank)	508,191	1
	12/9/2019 3:00	12/9/2019 3:00	0	0	560	0	0	24	Atlas	(blank)	168	1
	12/13/2019 19:45	12/13/2019 19:45	0	0	13,314	0	0	24	Atlas	(blank)	7,589	1
	12/16/2019 1:00	12/16/2019 2:00	60	0	38,227	0	0	6	Atlas	(blank)	4,205	1
	12/16/2019 14:45	12/16/2019 21:45	420	0	89,463	2	0	6	Atlas	(blank)	70,676	1
	12/29/2019 10:30	12/30/2019 2:00	930	1	134,818	1	1	24	Atlas	(blank)	198,183	1
CSO127 Total											1,338,485	13
CSO131	10/30/2019 14:30	10/30/2019 15:00	30	0	101,593	2	0	3	Atlas	(blank)	81,274	1
CSO131 Total											81,274	1
CSO141	10/30/2019 14:45	10/30/2019 14:45	0	0	156	2	0	3	Atlas	(blank)	120	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO141 Total											120	1
CSO142	10/6/2019 14:45	10/6/2019 14:45	0	1	8,581	0	0	6	Atlas	Retained by Sneads Branch	8,753	1
	10/15/2019 22:45	10/15/2019 22:45	0	0	3,667	0	0	1	Atlas	Retained by Sneads Branch	2,090	1
	10/30/2019 14:15	10/30/2019 14:30	15	0	16,106	2	0	3	Atlas	Retained by Sneads Branch	13,529	1
CSO142 Total											24,372	3
CSO146	10/30/2019 15:00	10/30/2019 15:00	0	0	3,779	2	0	3	Atlas	(blank)	3,174	1
	11/30/2019 11:00	11/30/2019 12:30	90	2	8,191	2	1	12	Atlas	(blank)	16,792	1
CSO146 Total											19,966	2
CSO148	10/6/2019 14:45	10/6/2019 19:45	300	1	8,784	1	1	6	Atlas	(blank)	10,541	1
	10/11/2019 21:15	10/11/2019 21:15	0	0	374	2	0	12	Atlas	(blank)	127	1
	10/15/2019 22:45	10/15/2019 23:15	30	0	22,689	1	1	1	Atlas	(blank)	16,563	1
	10/26/2019 5:15	10/26/2019 8:45	210	1	21,398	1	0	24	Atlas	(blank)	26,534	1
	10/26/2019 19:30	10/26/2019 19:30	0	1	543	1	0	24	Atlas	(blank)	673	1
	10/30/2019 12:45	10/30/2019 14:45	120	0	56,013	2	0	3	Atlas	(blank)	45,931	1
	10/31/2019 6:30	10/31/2019 7:00	30	0	16,909	3	0	6	Atlas	(blank)	11,667	1
	11/27/2019 0:15	11/27/2019 5:15	300	0	12,135	1	0	12	Atlas	(blank)	9,708	1
	11/30/2019 3:00	11/30/2019 16:15	795	2	27,622	3	1	12	Atlas	(blank)	50,549	1
	12/16/2019 17:00	12/16/2019 18:15	75	0	11,700	1	0	6	Atlas	(blank)	9,126	1
	12/29/2019 20:15	12/29/2019 20:45	30	1	8,339	1	1	24	Atlas	(blank)	12,092	1
CSO148 Total											193,511	11
CSO150	10/26/2019 7:30	10/26/2019 9:45	135	1	37,448	1	1	6	Atlas	(blank)	52,801	1
	10/30/2019 14:15	10/30/2019 17:30	195	0	89,280	2	0	3	Atlas	(blank)	62,496	1
	10/31/2019 6:45	10/31/2019 10:30	225	0	144,069	3	0	6	Atlas	(blank)	89,323	1
	11/27/2019 0:30	11/27/2019 1:00	30	0	28,843	1	0	6	Atlas	(blank)	21,344	1
	11/30/2019 5:00	11/30/2019 17:00	720	2	104,849	3	1	12	Atlas	(blank)	242,202	1
	12/16/2019 17:15	12/16/2019 22:00	285	0	45,659	1	0	6	Atlas	(blank)	36,071	1
	12/29/2019 14:15	12/30/2019 2:15	720	1	132,612	1	0	24	Atlas	(blank)	149,851	1
CSO150 Total											654,088	7
CSO151	10/6/2019 18:00	10/6/2019 20:15	135	1	8,801	1	0	6	Atlas	(blank)	10,649	1
	10/15/2019 23:00	10/15/2019 23:00	0	0	65,848	0	0	1	Atlas	(blank)	36,875	1

msd Safe, clean waterways

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	10/30/2019 14:30	10/30/2019 15:15	45	0	202,867	2	0	3	Atlas	(blank)	164,322	1
	10/31/2019 6:45	10/31/2019 7:45	60	0	156,820	3	0	6	Atlas	(blank)	103,501	1
	11/27/2019 0:30	11/27/2019 1:00	30	0	48,332	1	0	12	Atlas	(blank)	35,282	1
	11/30/2019 5:15	11/30/2019 16:45	690	2	115,832	3	1	12	Atlas	(blank)	209,656	1
	12/16/2019 14:45	12/16/2019 18:45	240	0	102,440	1	0	6	Atlas	(blank)	74,781	1
	12/29/2019 20:45	12/29/2019 21:15	30	1	34,969	1	0	24	Atlas	(blank)	45,110	1
CSO151 Total											680,176	8
CSO153	10/6/2019 14:30	10/6/2019 22:45	495	0	158,943	0	0	24	Atlas	(blank)	147,817	1
	10/11/2019 10:45	10/11/2019 11:00	15	0	33,908	1	0	1	Atlas	(blank)	12,885	1
	10/15/2019 22:30	10/15/2019 23:30	60	0	136,949	0	0	1	Atlas	(blank)	69,844	1
	10/26/2019 5:00	10/26/2019 9:00	240	1	173,928	1	1	24	Atlas	(blank)	233,063	1
	10/26/2019 18:00	10/26/2019 19:30	90	1	16,949	1	1	24	Atlas	(blank)	22,711	1
	10/30/2019 13:45	10/30/2019 15:15	90	0	324,888	2	0	3	Atlas	(blank)	250,164	1
	10/31/2019 5:45	10/31/2019 8:45	180	0	283,573	3	0	6	Atlas	(blank)	198,501	1
	11/7/2019 7:30	11/7/2019 10:00	150	0	29,589	0	0	24	Atlas	(blank)	19,233	1
	11/22/2019 5:30	11/22/2019 6:30	60	0	62,655	0	0	6	Atlas	(blank)	23,809	1
	11/26/2019 21:30	11/27/2019 6:45	555	0	421,875	1	0	12	Atlas	(blank)	253,125	1
	11/30/2019 2:45	11/30/2019 16:15	810	2	297,109	3	1	12	Atlas	(blank)	573,420	1
	12/9/2019 20:15	12/9/2019 20:15	0	0	49,275	0	0	1	Atlas	(blank)	9,855	1
	12/13/2019 19:15	12/13/2019 19:15	0	0	5,894	0	0	12	Atlas	(blank)	3,006	1
	12/16/2019 1:30	12/16/2019 1:30	0	0	7,660	0	0	6	Atlas	(blank)	766	1
	12/16/2019 14:00	12/16/2019 19:00	300	0	424,991	1	0	6	Atlas	(blank)	293,244	1
	12/29/2019 10:15	12/29/2019 22:15	720	1	181,825	1	0	24	Atlas	(blank)	203,644	1
CSO153 Total											2,315,087	16
CSO161	10/30/2019 14:15	10/30/2019 14:30	15	0	495	2	0	3	Atlas	(blank)	401	1
CSO161 Total											401	1
CSO166	10/6/2019 15:15	10/6/2019 20:45	330	1	332,766	0	0	6	Atlas	(blank)	372,698	1
	10/15/2019 22:30	10/15/2019 23:30	60	0	215,452	0	0	1	Atlas	(blank)	107,726	1
	10/26/2019 5:45	10/26/2019 9:15	210	1	219,424	1	0	24	Atlas	(blank)	265,503	1
	10/26/2019 20:00	10/26/2019 20:15	15	1	13,583	1	0	24	Atlas	(blank)	16,436	1
	10/30/2019 14:00	10/30/2019 16:00	120	0	588,873	2	0	3	Atlas	(blank)	518,208	1
	10/31/2019 6:15	10/31/2019 9:45	210	0	1,128,841	3	0	6	Atlas	(blank)	824,054	1
	11/26/2019 22:00	11/27/2019 5:45	465	0	366,175	1	0	12	Atlas	(blank)	296,602	1
	11/30/2019 3:15	11/30/2019 23:45	1230	2	2,016,148	3	1	24	Atlas	(blank)	3,387,129	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	12/16/2019 14:45	12/16/2019 20:30	345	0	1,849,349	2	0	6	Atlas	(blank)	1,460,986	1
	12/29/2019 10:45	12/30/2019 2:30	945	1	707,003	1	1	24	Atlas	(blank)	1,039,294	1
CSO166 Total											8,288,636	10
CSO167	10/6/2019 15:00	10/6/2019 20:15	315	1	101,412	0	0	6	Atlas	(blank)	102,426	1
	10/11/2019 11:15	10/11/2019 11:15	0	0	3,602	1	0	1	Atlas	(blank)	1,513	1
	10/15/2019 22:45	10/15/2019 23:15	30	0	126,217	0	0	1	Atlas	(blank)	45,438	1
	10/26/2019 5:30	10/26/2019 9:15	225	1	104,240	1	0	6	Atlas	(blank)	123,003	1
	10/26/2019 19:45	10/26/2019 19:45	0	1	6,116	1	0	6	Atlas	(blank)	7,217	1
	10/30/2019 14:00	10/30/2019 15:30	90	0	194,922	2	0	3	Atlas	(blank)	169,582	1
	10/31/2019 6:15	10/31/2019 8:15	120	0	210,519	3	0	6	Atlas	(blank)	151,574	1
	11/26/2019 22:00	11/27/2019 5:45	465	0	154,473	1	0	12	Atlas	(blank)	98,863	1
	11/30/2019 3:15	11/30/2019 17:30	855	2	366,149	2	1	12	Atlas	(blank)	582,177	1
	12/9/2019 20:30	12/9/2019 20:30	0	0	52,643	0	0	1	Atlas	(blank)	11,055	1
	12/16/2019 14:30	12/16/2019 19:15	285	0	176,390	1	0	12	Atlas	(blank)	128,765	1
	12/29/2019 13:15	12/30/2019 1:30	735	1	122,281	1	0	24	Atlas	(blank)	138,178	1
CSO167 Total											1,559,791	12
CSO174	10/6/2019 14:45	10/6/2019 20:00	315	1	193,383	0	0	6	Atlas	Retained by Sneads Branch	197,251	1
	10/15/2019 22:45	10/15/2019 23:00	15	0	504,330	0	0	1	Atlas	Retained by Sneads Branch	287,468	1
	10/26/2019 5:30	10/26/2019 9:00	210	1	205,974	1	0	24	Atlas	Retained by Sneads Branch	249,229	1
	10/30/2019 14:15	10/30/2019 15:00	45	0	863,430	2	0	3	Atlas	Retained by Sneads Branch	725,281	1
	10/31/2019 6:30	10/31/2019 7:15	45	0	321,834	3	0	6	Atlas	Retained by Sneads Branch	215,629	1
	11/27/2019 0:30	11/27/2019 1:00	30	0	222,021	1	0	6	Atlas	Retained by Sneads Branch	139,873	1
	11/30/2019 4:30	11/30/2019 16:30	720	2	546,507	3	1	12	Atlas	(blank)	1,120,339	1
	12/16/2019 17:15	12/16/2019 18:30	75	0	378,454	1	0	6	Atlas	Retained by Sneads Branch	253,564	1
	12/29/2019 20:30	12/29/2019 21:00	30	1	161,179	0	0	12	Atlas	Retained by Sneads Branch	172,461	1
CSO174 Total											3,361,095	9
CSO180	10/6/2019 14:45	10/6/2019 14:45	0	1	5,459	0	0	6	Atlas	Retained by Sneads Branch	5,568	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	10/15/2019 22:45	10/15/2019 22:45	0	0	6,439	0	0	1	Atlas	Retained by Sneads Branch	3,670	1
	10/26/2019 5:30	10/26/2019 8:45	195	1	27,736	0	0	24	Atlas	Retained by Sneads Branch	33,561	1
	10/30/2019 14:00	10/30/2019 14:45	45	0	62,392	2	0	3	Atlas	Retained by Sneads Branch	52,409	1
	10/31/2019 6:30	10/31/2019 6:45	15	0	15,112	3	0	6	Atlas	Retained by Sneads Branch	10,125	1
	11/27/2019 0:15	11/27/2019 0:30	15	0	6,830	1	0	6	Atlas	Retained by Sneads Branch	4,303	1
	11/30/2019 4:30	11/30/2019 12:00	450	2	16,220	2	1	12	Atlas	(blank)	33,252	1
	12/16/2019 17:15	12/16/2019 18:00	45	0	7,846	1	0	6	Atlas	Retained by Sneads Branch	5,257	1
	12/29/2019 10:15	12/29/2019 10:15	0	1	264	0	0	12	Atlas	Retained by Sneads Branch	283	1
	12/29/2019 20:15	12/29/2019 20:45	30	1	5,607	0	0	12	Atlas	Retained by Sneads Branch	6,000	1
CSO180 Total											154,428	10
CSO183	12/16/2019 18:45	12/16/2019 18:45	0	0	101	1	0	12	Atlas	Retained by Sneads Branch	79	1
CSO183 Total											79	1
CSO184	10/6/2019 14:45	10/6/2019 14:45	0	1	4,052	0	0	6	Atlas	Retained by Sneads Branch	4,781	1
	10/15/2019 22:45	10/15/2019 22:45	0	0	1,425	0	0	1	Atlas	Retained by Sneads Branch	841	1
	10/30/2019 14:15	10/30/2019 14:15	0	0	750	2	0	3	Atlas	Retained by Sneads Branch	585	1
CSO184 Total											6,207	3
CSO185	10/6/2019 14:45	10/6/2019 15:00	15	1	43,018	0	0	6	Atlas	Retained by Sneads Branch	50,761	1
	10/15/2019 22:45	10/15/2019 23:00	15	0	44,453	0	0	1	Atlas	Retained by Sneads Branch	26,227	1
	10/26/2019 5:45	10/26/2019 9:00	195	1	4,187	0	0	24	Atlas	Retained by Sneads Branch	4,815	1
	10/30/2019 14:15	10/30/2019 14:45	30	0	42,758	2	0	3	Atlas	Retained by Sneads Branch	33,351	1
	10/31/2019 6:45	10/31/2019 6:45	0	0	5,228	2	0	6	Atlas	Retained by Sneads Branch	3,503	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
	11/27/2019 0:30	11/27/2019 0:45	15	0	1,539	1	0	12	Atlas	Retained by Sneads Branch	1,062	1
	11/30/2019 4:45	11/30/2019 14:00	555	2	4,705	3	1	12	Atlas	(blank)	10,116	1
	12/16/2019 18:00	12/16/2019 18:00	0	0	649	1	0	12	Atlas	Retained by Sneads Branch	506	1
	12/29/2019 20:30	12/29/2019 20:45	15	1	1,505	1	0	24	Atlas	Retained by Sneads Branch	2,002	1
CSO185 Total											132,343	9
CSO189	10/26/2019 5:45	10/26/2019 6:00	15	1	156,916	0	1	6	Atlas	(blank)	210,267	1
CSO189 Total											210,267	1
CSO190	12/29/2019 20:30	12/29/2019 20:30	0	1	555	1	0	24	Atlas	(blank)	671	1
CSO190 Total											671	1
CSO191	10/6/2019 15:45	10/6/2019 18:30	165	0	90,040	0	0	24	Atlas	(blank)	89,140	1
	10/15/2019 23:15	10/16/2019 2:15	180	0	771,989	0	0	3	Atlas	(blank)	216,157	1
	10/26/2019 6:00	10/26/2019 6:30	30	1	95,678	0	1	6	Atlas	(blank)	132,036	1
	10/30/2019 14:15	10/30/2019 14:30	15	0	49,624	2	0	3	Atlas	(blank)	30,767	1
	11/27/2019 0:45	11/27/2019 2:15	90	1	236,433	2	0	6	Atlas	(blank)	250,619	1
	11/30/2019 4:15	11/30/2019 6:00	105	2	535,663	2	1	12	Atlas	(blank)	1,285,590	1
CSO191 Total											2,004,309	6
CSO193	10/30/2019 14:15	10/30/2019 14:15	0	0	319	2	0	3	Atlas	(blank)	233	1
CSO193 Total											233	1
CSO197	10/30/2019 14:00	10/30/2019 14:00	0	0	542	2	0	3	Atlas	(blank)	401	1
CSO197 Total											401	1
CSO198	10/30/2019 14:00	10/30/2019 14:15	15	0	2,064	2	0	3	Atlas	(blank)	1,527	1
	11/30/2019 4:30	11/30/2019 11:45	435	2	15,800	3	1	12	Atlas	(blank)	33,969	1
CSO198 Total											35,496	2
CSO199	10/15/2019 22:30	10/15/2019 22:30	0	0	1,601	0	1	1	Atlas	(blank)	1,073	1
	10/30/2019 14:15	10/30/2019 14:30	15	0	2,441	2	0	3	Atlas	(blank)	1,806	1
CSO199 Total											2,879	2
CSO201	10/30/2019 14:30	10/30/2019 14:30	0	0	321	2	0	3	Atlas	(blank)	234	1

CSO	START DATE	END DATE	DURATION (MIN)	RAIN TOTAL (INCH)	DISCHARGE PER RAIN	ANTECEDENT RAIN	FREQUENCY (YR)	PERIOD (HR)	STANDARD	COMMENT	DISCHARGE VOLUME (GAL)	COUNT
CSO201 Total											234	1
CSO202	10/15/2019 22:30	10/15/2019 22:30	0	0	2,096	0	1	1	Atlas	(blank)	1,404	1
	10/26/2019 7:15	10/26/2019 7:15	0	1	28	0	0	6	Atlas	(blank)	36	1
	10/30/2019 14:00	10/30/2019 14:30	30	0	4,286	2	0	3	Atlas	(blank)	3,172	1
CSO202 Total											4,612	3
CSO203	10/30/2019 14:15	10/30/2019 14:30	15	0	78	2	0	3	Atlas	(blank)	58	1
CSO203 Total											58	1
CSO205	10/6/2019 14:45	10/6/2019 23:00	495	1	3,598	1	0	6	Atlas	Retained by Sneads Branch	4,066	1
	10/11/2019 10:45	10/11/2019 11:30	45	0	1,270	1	0	1	Atlas	Retained by Sneads Branch	470	1
	10/15/2019 22:45	10/16/2019 0:30	105	0	7,215	0	0	1	Atlas	Retained by Sneads Branch	3,896	1
	10/26/2019 5:15	10/26/2019 19:45	870	1	3,699	1	0	24	Atlas	Retained by Sneads Branch	4,624	1
	10/30/2019 14:00	10/30/2019 15:15	75	0	3,859	2	0	3	Atlas	Retained by Sneads Branch	2,856	1
	10/31/2019 6:00	10/31/2019 8:00	120	0	3,234	3	0	6	Atlas	Retained by Sneads Branch	2,070	1
	12/16/2019 17:30	12/16/2019 18:30	60	0	688	1	0	6	Atlas	Retained by Sneads Branch	571	1
CSO205 Total											18,553	7
Grand Total											162,174,694	324

Appendix C Acronyms

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

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

Appendix D SCAP Balance

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

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	10/2/2019	LE978334	Houchens Industries	LAT EXT	780	-1,697
Cedar Creek Total						514,653
Floyds Fork	11/1/2008	235557	MAINTENANCE WORK FY06 AUG-FY09 NOV - FLOYDS FORK	SCAPCREDIT		14,540
	12/31/2008	362638	MAINTENANCE WORK FY09A - FLOYDS FORK	SCAPCREDIT		1
	6/30/2009	362647	MAINTENANCE WORK FY09B - FLOYDS FORK	SCAPCREDIT		4
	12/31/2009	362651	MAINTENANCE WORK FY10A - FLOYDS FORK	SCAPCREDIT		524
	1/5/2010	230379	SHAKES RUN SECTION 4	LAT EXT	3,770	-8,200
	6/30/2010	362655	MAINTENANCE WORK FY10B - FLOYDS FORK	SCAPCREDIT		82
	12/31/2010	362661	MAINTENANCE WORK FY11A - FLOYDS FORK	SCAPCREDIT		14,163
	6/30/2011	362669	MAINTENANCE WORK FY11B - FLOYDS FORK	SCAPCREDIT		22,707
	10/12/2011	309608	BLANKENBAKER TRAIL OFFICE LN-B	LAT EXT	2,880	-6,264
	10/17/2011	242480	CLAIBOURNE CROSSINGS PHASE 2	LAT EXT	0	0
	12/31/2011	359320	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		362674	MAINTENANCE WORK FY12A - FLOYDS FORK	SCAPCREDIT		317
	3/13/2012	319027	PREMIER SURGERY CENTER	LAT EXT	5,740	-12,485
	6/30/2012	362678	MAINTENANCE WORK FY12B - FLOYDS FORK	SCAPCREDIT		338
	10/26/2012	315945	BROOKFIELD SEC 3	LAT EXT	12,800	-27,840
	12/18/2012	361689	LAKE FOREST REHAB PH1	SCAPCREDIT		174,769
	12/31/2012	362683	MAINTENANCE WORK FY13A - FLOYDS FORK	SCAPCREDIT		10
	5/8/2013	331397	BROOKFIELD SEC 2A	LAT EXT	14,400	-31,320
	6/30/2013	13SC1000	FY14 STARVIEW REHABILITATION	SCAPCREDIT		14,183
		SC1082514	MAINTENANCE WORK FY13 JAN-JUN-FLOYDS FORK	SCAPCREDIT		161
	12/30/2013	SC1082517	MAINTENANCE WORK FY14 JUL-DEC-FLOYDS FORK	SCAPCREDIT		991
	6/30/2014	SC1082518	MAINTENANCE WORK FY14 JAN-JUN-FLOYDS FORK	SCAPCREDIT		662
	12/30/2014	SC1082519	MAINTENANCE WORK FY15 JUL-DEC-FLOYDS FORK	SCAPCREDIT		1,318
	2/18/2015	13LE1062	SPEEDWAY #9451	LAT EXT	540	-1,175
	6/30/2015	SC1003809	BERRYTOWN WQTC I/I REMEDIATION FY14	SCAPCREDIT		116,834
		SC1082520	MAINTENANCE WORK FY15 JAN-JUN-FLOYDS FORK	SCAPCREDIT		661
	11/6/2015	SC1003723	MIDDLETOWN SSR P2S2 I/I REMEDIATION	SCAPCREDIT		102
	12/30/2015	SC1082521	MAINTENANCE WORK FY16 JUL-DEC-FLOYDS FORK	SCAPCREDIT		659
	1/7/2016	LE941673	Locust Creek Section 8B	LAT EXT	2,000	-4,350
	6/30/2016	SC1082523	MAINTENANCE WORK FY16 JAN-JUN-FLOYDS FORK	SCAPCREDIT		3,578
	7/7/2016	SC1003331	CONTRACTED WORK FY16 - FLOYDS FORK	SCAPCREDIT		35
	9/20/2016	LE932677	Shakes Run Sec 9	LAT EXT	12,000	-26,100
	12/30/2016	SC1082524	MAINTENANCE WORK FY17 JUL-DEC-FLOYDS FORK	SCAPCREDIT		1,804
	1/4/2017	LE945783	Urton Woods, Section 2B	LAT EXT	17,200	-37,410
	1/6/2017	LE983784	Catalpa Farms Subdivision	LAT EXT	16,000	-34,800
	2/27/2017	LE971261	Notting Hills Section 4 and Clubhouse	LAT EXT	10,400	-22,620
	6/30/2017	SC1082525	MAINTENANCE WORK FY17 JAN-JUN-FLOYDS FORK	SCAPCREDIT		1,320

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	12/30/2017	SC1082526	MAINTENANCE WORK FY18 JUL-DEC-FLOYDS FORK	SCAPCREDIT		6,158
	1/7/2019	LE1039193	Glen Lakes Section 4 - Phase 3	LAT EXT	16,400	-35,670
	10/21/2019	LE1050932	Courtyard at Curry Farms Section 1	LAT EXT	17,000	-36,975
Floyds Fork Total						94,712
Hite Creek	5/15/2006	SC1006307	CONTRACTED WORK FY06 - HITE CREEK	SCAPCREDIT		656
	11/1/2008	235561	MAINTENANCE WORK FY06 AUG-FY09 NOV - HITE CREEK	SCAPCREDIT		6,404
	12/31/2008	362641	MAINTENANCE WORK FY09A - HITE CREEK	SCAPCREDIT		2
	6/1/2009	SC1006214	CONTRACTED WORK FY09 - HITE CREEK	SCAPCREDIT		328
	6/30/2009	362648	MAINTENANCE WORK FY09B - HITE CREEK	SCAPCREDIT		7
	12/31/2009	362652	MAINTENANCE WORK FY10A - HITE CREEK	SCAPCREDIT		10
	6/30/2010	362657	MAINTENANCE WORK FY10B - HITE CREEK	SCAPCREDIT		332
	12/17/2010	320906	FLOYDSBURG ROAD I/I REHABILITA	SCAPCREDIT		28,437
	12/31/2010	362662	MAINTENANCE WORK FY11A - HITE CREEK	SCAPCREDIT		9
	6/30/2011	362670	MAINTENANCE WORK FY11B - HITE CREEK	SCAPCREDIT		9
	9/7/2011	SC1011058	Meadow Stream Pump Station & Force Main Expansion	SCAPCREDIT		2,304,000
	9/28/2011	246638	CHAPMAN COURT S/S	LAT EXT	800	-1,740
	12/31/2011	362675	MAINTENANCE WORK FY12A - HITE CREEK	SCAPCREDIT		340
	6/30/2012	362679	MAINTENANCE WORK FY12B - HITE CREEK	SCAPCREDIT		5,007
	8/31/2012	290181	CAMDEN WOOD APARTMENTS	LAT EXT	12,400	-26,970
	12/1/2012	304536	MAGNOLIA SPRINGS EAST PRIV P/S	LAT EXT	9,500	-20,663
	12/7/2012	335610	ROCK SPRINGS FARM SEC 4B	LAT EXT	6,400	-13,920
	12/31/2012	362684	MAINTENANCE WORK FY13A - HITE CREEK	SCAPCREDIT		7
	4/11/2013	SC1005530	CONTRACTED WORK FY13 - HITE CREEK	SCAPCREDIT		1,442
	6/30/2013	SC1082527	MAINTENANCE WORK FY13 JAN-JUN-HITE CREEK	SCAPCREDIT		967
	12/30/2013	SC1082528	MAINTENANCE WORK FY14 JUL-DEC-HITE CREEK	SCAPCREDIT		3,211
	6/30/2014	SC1082529	MAINTENANCE WORK FY14 JAN-JUNE-HITE CREEK	SCAPCREDIT		2,207
	12/30/2014	SC1082530	MAINTENANCE WORK FY15 JUL-DEC-HITE CREEK	SCAPCREDIT		360
	1/27/2015	SC1006178	CONTRACTED WORK FY14 - HITE CREEK	SCAPCREDIT		77,660
	3/13/2015	SC983697	MEADOWSTREAM REHABILITATION - FY13	SCAPCREDIT		448,447
	6/30/2015	SC1082531	MAINTENANCE WORK FY15 JAN-JUN-HITE CREEK	SCAPCREDIT		124
	12/30/2015	SC1082532	MAINTENANCE WORK FY16 JUL-DEC-HITE CREEK	SCAPCREDIT		1,191
	6/30/2016	SC1082533	MAINTENANCE WORK FY16 JAN-JUN-HITE CREEK	SCAPCREDIT		336
	9/13/2016	LE943178	Rock Springs Farm Section 5A	LAT EXT	6,800	-14,790
	10/26/2016	SC1006192	CONTRACTED WORK FY15 - HITE CREEK	SCAPCREDIT		1
	12/30/2016	SC1082534	MAINTENANCE WORK FY17 JUL-DEC-HITE CREEK	SCAPCREDIT		3,599
	3/17/2017	LE971406	Old Henry Business Park	LAT EXT	930	-2,023
	6/30/2017	SC1082535	MAINTENANCE WORK FY17 JAN-JUN-HITE CREEK	SCAPCREDIT		4,109
	12/30/2017	SC1082536	MAINTENANCE WORK FY18 JUL-DEC-HITE CREEK	SCAPCREDIT		6,823
	11/18/2019	LE1103150	Anchorage Plaza II Phase II	LAT EXT	2,300	-5,003
Hite Creek Total						2,810,916
J'Town	11/1/2008	235563	MAINTENANCE WORK FY06 AUG-FY09 NOV - JEFFERSONTOWN	SCAPCREDIT		6,203
	12/31/2008	359323	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	8/10/2010	254871	LAKESIDE BAPT CHURCH PRIV PS	LAT EXT	2,500	-5,438

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	8/11/2011	340213	JEFFERSONTOWN ENG REHAB	SCAPCREDIT		997,448
	12/31/2011	359324	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		4,000
	12/31/2012	14SC1002	MAINTENANCE WORK FY13A - JEFFERSONTOWN	SCAPCREDIT		3,490
	5/28/2013	337261	SINGLE FAMILY 2909 PELHAM CT	LAT EXT	400	-870
	6/28/2013	13LE1010	SWOPE HR & TRAINING BLDG	LAT EXT	400	-870
	10/25/2013	13LE1092	BALE EQUIPMENT	LAT EXT	450	-979
	2/27/2014	13LE1098	UNIPAK	LAT EXT	720	-1,566
	12/31/2014	13LE1067	PARK COMMUNITY	LAT EXT	2,220	-4,829
	2/1/2016	14LE1149	Grand Lakes Section 3	LAT EXT	5,600	-12,180
	3/10/2016	LE924049	Blankenbaker Road S/S	LAT EXT	9,010	-19,597
	5/4/2016	326360	WATTERSON TRAIL CENTER	LAT EXT	2,745	-5,970
	6/21/2016	LE930127	Vantage Point Sec 3B	LAT EXT	7,200	-15,660
	7/28/2016	13LE1158	GOODWILL INDUSTRIES OF KENTUCKY	LAT EXT	400	-870
	11/8/2016	14LE1148	Grand Lakes Section 2	LAT EXT	4,400	-9,570
	3/23/2017	LE926081	Monticello Manors Sec 2	LAT EXT	7,600	-16,530
	3/31/2017	LE967619	Louis F. Zoeller, Jr Minor Plat	LAT EXT	400	-870
J'Town Total						919,342
Mill Creek	12/31/2005	359380	CALENDAR 2005 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
	12/31/2007	359381	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		24,000
	11/1/2008	235568	MAINTENANCE WORK FY06 AUG-FY09 NOV - MILL CREEK	SCAPCREDIT		51,530
	12/31/2008	359382	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		16,000
		362642	MAINTENANCE WORK FY09A - MILL CREEK	SCAPCREDIT		93
	6/30/2009	362649	MAINTENANCE WORK FY09B - MILL CREEK	SCAPCREDIT		1,507
	9/9/2009	236614	DEVEROES	LAT EXT	960	-2,088
	12/31/2009	359383	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		32,000
		362653	MAINTENANCE WORK FY10A - MILL CREEK	SCAPCREDIT		25,272
	1/6/2010	253586	KINGSFORD RETAIL CENTER	LAT EXT	480	-1,044
	4/28/2010	238421	6840 DIXIE HWY OUTLOT	LAT EXT	2,100	-4,568
	6/30/2010	362658	MAINTENANCE WORK FY10B - MILL CREEK	SCAPCREDIT		6,216
	7/2/2010	259408	FAMILY DOLLAR 5105 DIXIE	LAT EXT	1,200	-2,610
	7/23/2010	264294	SAINT PETER THE APOSTLE CATHOL	LAT EXT	2,000	-4,350
	10/12/2010	276215	FAMILY DOLLAR - KRISTIN WAY	LAT EXT	400	-870
	12/31/2010	359325	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		359384	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		362664	MAINTENANCE WORK FY11A - MILL CREEK	SCAPCREDIT		22,745
	6/30/2011	320916	SONNE AVE PS REHABILITATION -	SCAPCREDIT		120,800
		362671	MAINTENANCE WORK FY11B - MILL CREEK	SCAPCREDIT		11,745
	10/4/2011	299399	FAMILY DOLLAR - GREENWOOD RD	LAT EXT	800	-1,740
	11/9/2011	309018	PRP PERFORMING ARTS ADDITION	LAT EXT	1,134	-2,466
	12/31/2011	359326	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		359385	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
		362676	MAINTENANCE WORK FY12A - MILL CREEK	SCAPCREDIT		4,800
	1/19/2012	318096	CRACKER BARREL OLD COUNTRY	LAT EXT	6,000	-13,050
	3/16/2012	SC1005678	CONTRACTED WORK FY12 - MILL CREEK	SCAPCREDIT		22
	5/21/2012	262545	DIXIE MANOR SHOPPING CENTER	LAT EXT	965	-2,099
	6/26/2012	300374	FORT KNOX FEDERAL CREDIT UNION	LAT EXT	400	-870
	6/30/2012	361693	FY12 MILL CREEK REHAB	SCAPCREDIT		81,675

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
		362680	MAINTENANCE WORK FY12B - MILL CREEK	SCAPCREDIT		4,133
	7/24/2012	231800	PIONEER MOBILE HOME PARK	LAT EXT	11,200	-24,360
	9/18/2012	237457	WAVERLY HILLS	LAT EXT	400	-870
	10/19/2012	341883	NHK SPRING PRECISION	LAT EXT	17,800	-38,715
	12/5/2012	334997	BEECHLAND BAPTIST CHURCH	LAT EXT	2,715	-5,905
	12/31/2012	359327	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		148,000
		359386	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		362685	MAINTENANCE WORK FY13A - MILL CREEK	SCAPCREDIT		22,996
	1/18/2013	343763	SOUTHEAST CHRISTIAN CHURCH SW	LAT EXT	6,000	-13,050
	3/20/2013	224875	ASHBY GREEN APARTMENT HOMES	LAT EXT	36,400	-79,170
	6/6/2013	265944	RIVERPORT PHASE 4A - MICHELIN	LAT EXT	400	-870
	6/30/2013	SC1082559	MAINTENANCE WORK FY13 JAN-JUN-MILL CREEK	SCAPCREDIT		32,425
	9/10/2013	314887	DAYTON FREIGHT	LAT EXT	1,200	-2,610
	9/26/2013	13LE1014	LOUISVILLE FREE PUBLIC LIBRARY SOUTHWEST	LAT EXT	8,200	-17,835
	10/3/2013	357140	FAMILY DOLLAR CANE RUN ROAD	LAT EXT	832	-1,810
	12/30/2013	SC1082560	MAINTENANCE WORK FY14 JUL-DEC-MILL CREEK	SCAPCREDIT		11,451
	1/29/2014	13LE1171	SINGLE FAMILY HOME 3700 ROMANIA DR	LAT EXT	400	-870
	6/30/2014	SC1082562	MAINTENANCE WORK FY14 JAN-JUN-MILL CREEK	SCAPCREDIT		7,753
	12/30/2014	SC1082563	MAINTENANCE WORK FY15 JUL-DEC-MILL CREEK	SCAPCREDIT		4,491
	3/10/2015	SC1005536	ROSA TERRACE I/I REHABILITATION FY13	SCAPCREDIT		156,635
	6/30/2015	SC1082564	MAINTENANCE WORK FY15 JAN-JUN-MILL CREEK	SCAPCREDIT		4,861
	7/31/2015	SC1003690	CONTRACTED WORK FY15 - MILL CREEK	SCAPCREDIT		58
	12/30/2015	SC1082565	MAINTENANCE WORK FY16 JUL-DEC-MILL CREEK	SCAPCREDIT		6,692
	6/30/2016	SC1082566	MAINTENANCE WORK FY16 JAN-JUN-MILL CREEK	SCAPCREDIT		3,523
	7/28/2016	LE944727	Britz Deer Hollow Lane	LAT EXT	800	-1,740
	12/30/2016	SC1082567	MAINTENANCE WORK FY17 JUL-DEC-MILL CREEK	SCAPCREDIT		12,857
	6/30/2017	SC1082568	MAINTENANCE WORK FY17 JAN-JUN-MILL CREEK	SCAPCREDIT		5,103
	12/30/2017	SC1082569	MAINTENANCE WORK FY18 JUL-DEC-MILL CREEK	SCAPCREDIT		27,293
	4/10/2019	LE995375	1105 Dorsey lane	LAT EXT	10,300	-22,403
	10/31/2019	LE1039415	Delcour Multi-Family Apartments	LAT EXT	60,400	-131,370
Mill Creek Total						521,343
Middle Fork	12/31/2007	359328	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		20,000
		359400	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		84,000
	11/1/2008	235566	MAINTENANCE WORK FY06 AUG-FY09 NOV - MOIDDLE FORK	SCAPCREDIT		43,779
	12/31/2008	359329	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		SC1011287	MAINTENANCE WORK FY09A - MIDDLE FORK	SCAPCREDIT		13
	1/16/2009	236517	ANCHOR ESTATES MH REHAB	SCAPCREDIT		15,552
	3/30/2009	217235	SINKING FORK ICA PHASE I REHAB	SCAPCREDIT		437,967
	5/15/2009	235376	MIDDLE FORK INT REHAB PH1	SCAPCREDIT		487,744
	5/26/2009	179246	SHADY GLEN OF LYNDON PERSONAL	LAT EXT	(500)	1,088
	6/30/2009	SC1011288	MAINTENANCE WORK FY09B - MIDDLE FORK	SCAPCREDIT		4,208
	11/4/2009	250572	1316 WITAWANGA AVE	LAT EXT	400	-870
	12/31/2009	359331	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		24,000
		359401	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		SC1011290	MAINTENANCE WORK FY10A - MIDDLE FORK	SCAPCREDIT		50
	3/16/2010	197432	ALMOST HOME KENNELS - ALL PET	LAT EXT	3,700	-8,048
	4/15/2010	260064	OXMOOR GOLF FRONT 9	LAT EXT	400	-870

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
		260065	OXMOOR GOLF BACK 9	LAT EXT	400	-870
	4/27/2010	229834	THE BROOK HOS- DUPONT ADDITION	LAT EXT	1,763	-3,835
	6/30/2010	SC1011292	MAINTENANCE WORK FY10B - MIDDLE FORK	SCAPCREDIT		1,113
	7/2/2010	265723	Z-XPRESS CAR WASH	LAT EXT	5,449	-11,852
	7/14/2010	255792	HERR LANE APARTMENTS - 8 PLEX	LAT EXT	2,400	-5,220
		255793	HERR LANE APARTMENTS - 4 PLEX	LAT EXT	1,200	-2,610
	9/9/2010	274303	FARM CREDIT SERVICES	LAT EXT	525	-1,142
	12/15/2010	278015	METROPOLITAN UROLOGY	LAT EXT	400	-870
	12/31/2010	359333	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		359402	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		8,000
		SC1011293	MAINTENANCE WORK FY11A - MIDDLE FORK	SCAPCREDIT		1,205
	1/20/2011	285637	SHELBYHURST OFFICE BUILDING 1	LAT EXT	6,600	-14,355
	1/27/2011	313465	DORSEY POINTE/CODOMINIUMS 8-13	LAT EXT	2,400	-5,220
	4/14/2011	291263	BROWNS LANE BUILDING	LAT EXT	400	-870
	6/14/2011	293400	FOUR PLEX APARTMENTS	LAT EXT	1,200	-2,610
	6/30/2011	SC1011294	MAINTENANCE WORK FY11B - MIDDLE FORK	SCAPCREDIT		7,183
	8/11/2011	330019	FY11 ANCHOR ESTATES REHAB	SCAPCREDIT		1,359
	10/31/2011	310046	EL NAPEL - MCMAHAN CENTER	LAT EXT	3,100	-6,743
	11/29/2011	314591	CHOCOLATE MARTINI BAR/REST	LAT EXT	3,275	-7,123
	12/27/2011	320983	HURSTBOURNE I/I INVESTIGATION	SCAPCREDIT		1,408,279
	12/31/2011	359335	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		16,000
		SC1011295	MAINTENANCE WORK FY12A - MIDDLE FORK	SCAPCREDIT		919
	2/15/2012	321228	SINGLE FAMILY UNIT	LAT EXT	400	-870
	3/16/2012	SC1005671	CONTRACTED WORK FY12 - MIDDLE FORK	SCAPCREDIT		7,305
	3/27/2012	321647	SINGLE FAMILY	LAT EXT	400	-870
	6/22/2012	328074	SINGLE FAMILY-703 FOUNTAIN AVE	LAT EXT	400	-870
	6/30/2012	SC1011297	MAINTENANCE WORK FY12B - MIDDLE FORK	SCAPCREDIT		949
	8/20/2012	193195	CEDAR LAKE LODGE WASHBURN	LAT EXT	1,900	-4,133
	8/23/2012	320923	ST MATTHEWS I/I REHABILITATION	SCAPCREDIT		20,841
	9/5/2012	337796	CHAMPPS	LAT EXT	635	-1,381
	12/28/2012	347126	ADVANCE PRODUCTION SYSTEMS	LAT EXT	400	-870
	12/31/2012	14SC1003	MAINTENANCE WORK FY13A - MIDDLE FORK	SCAPCREDIT		3,309
		359336	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		92,000
	1/4/2013	339367	BAPTIST RADIATION ONCOLOGY	LAT EXT	1,500	-3,263
	1/16/2013	340778	PANDA RESTAURANT	LAT EXT	1,725	-3,752
	2/4/2013	328659	SINGLE FAMILY HOME - 6911 AMBR	LAT EXT	400	-870
	2/20/2013	352805	POOL HOUSE 9213 REIGATE COURT	LAT EXT	200	-435
	3/19/2013	14LE1001	MIRANDA LAGRANGE RD	LAT EXT	400	-870
	3/20/2013	350246	SINGLE FAMILY - 218 BLISS AVE	LAT EXT	400	-870
	3/26/2013	349974	SINGLE FAMILY 205 N WATTERSON	LAT EXT	400	-870
	4/15/2013	342433	SHELBYHURST 700 OFFICE BLDG	LAT EXT	7,500	-16,313
	4/16/2013	350340	JARED THE GALLERY OF JEWELRY	LAT EXT	770	-1,675
	5/30/2013	SC1005532	CONTRACTED WORK FY13 - MIDDLE FORK	SCAPCREDIT		6,480
	6/7/2013	13LE1009	Single family 11716 Wetherby Ave	LAT EXT	400	-870
	6/30/2013	SC1082545	MAINTENANCE WORK FY13 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		6,989
	8/28/2013	13LE1001	Single Family 835 Fountain Ave	LAT EXT	400	-870
	9/10/2013	355162	PROPOSED RESTAURANT	LAT EXT	7,540	-16,400

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	9/30/2013	13LE1045	SINGLE FAMILY 8325 WHIPPS MILL RD	LAT EXT	400	-870
	10/22/2013	319292	WATERMARK ON HURSTBOURNE	LAT EXT	71,600	-155,730
	10/28/2013	331542	DENTAL/MEDICAL OFFICE BLDG	LAT EXT	400	-870
	11/5/2013	13LE1128	SINGLE FAMILY HOME 1327 ETAWAH AVE	LAT EXT	400	-870
		13LE1144	SINGLE FAMILY 1329 ETAWAH AVE	LAT EXT	400	-870
	11/25/2013	13LE1165	SINGLE FAMILY 8504 LORE LANE	LAT EXT	400	-870
	11/26/2013	13LE1146	CITY OF ST MATTHEWS COMMUNITY CTR PARK RESTROOM	LAT EXT	1,500	-3,263
	12/11/2013	13LE1099	NICKLIES - ST MATTHEWS	LAT EXT	1,920	-4,176
	12/18/2013	353963	DORSEY COMMONS TRACTS 1,2,3	LAT EXT	4,335	-9,429
	12/30/2013	SC1082546	MAINTENANCE WORK FY14 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		91,183
	12/31/2013	352026	MCMAHAN PLAZA PHASE II BLDG B	LAT EXT	766	-1,666
	4/10/2014	13LE1117	THE VININGS	LAT EXT	850	-1,849
	6/30/2014	14LE1128	WALDORF SCHOOL OF LOUISVILLE	LAT EXT	400	-870
		SC1082547	MAINTENANCE WORK FY14 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		4,404
	12/30/2014	SC1082548	MAINTENANCE WORK FY15 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,664
	2/10/2015	SC1006201	GOOSE CREEK PLANTATION I/I REHABILITATION FY14	SCAPCREDIT		163,919
	2/11/2015	SC1006179	CONTRACTED WORK FY14 - MIDDLE FORK	SCAPCREDIT		15,043
	6/30/2015	SC1082549	MAINTENANCE WORK FY15 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		2,568
	12/30/2015	SC1082550	MAINTENANCE WORK FY16 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		15,216
	6/8/2016	LE939199	Westport Road Apartments	LAT EXT	62,800	-136,590
	6/30/2016	SC1082552	MAINTENANCE WORK FY16 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,573
	8/30/2016	LE971405	Lyndon Lane Office Condos	LAT EXT	2,652	-5,768
	10/18/2016	SC1003387	CONTRACTED WORK FY16 - MIDDLE FORK	SCAPCREDIT		91,264
	10/24/2016	SC1006194	CONTRACTED WORK FY15 - MIDDLE FORK	SCAPCREDIT		3
	12/20/2016	LE938563	The Paddock at Sawyer Park	LAT EXT	99,800	-217,065
	12/30/2016	SC1082554	MAINTENANCE WORK FY17 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		2,385
	5/9/2017	LE1005641	City of Anchorage Sewer Extension	LAT EXT	800	-1,740
	6/30/2017	SC1082555	MAINTENANCE WORK FY17 JAN-JUN-MIDDLE FORK BEARGRAS	SCAPCREDIT		3,799
	12/30/2017	SC1082557	MAINTENANCE WORK FY18 JUL-DEC-MIDDLE FORK BEARGRAS	SCAPCREDIT		5,851
	2/19/2018	LE1017531	526 & 528 Fountain Ave	LAT EXT	800	-1,740
	9/7/2018	166053	616 & 618 FOUNTAIN AVE S/S	LAT EXT	1,600	-3,480
	7/26/2019	LE1020250	LFPL - Northeast Regional Library	LAT EXT	800	-1,740
		LE1024084	Morat Avenue Apartments	LAT EXT	63,200	-137,460
	11/4/2019	LE1083952	1700 Cold Spring Rd & 12004 Osage Rd	LAT EXT	800	-1,740
	12/2/2019	LE1056406	Stewart Condos	LAT EXT	4,500	-9,788
Middle Fork Total						2,299,600
Northern Ditch	12/31/2007	359404	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		28,000
	11/1/2008	235569	MAINTENANCE WORK FY06 AUG-FY09 NOV - NORTHERN DIT	SCAPCREDIT		11,147

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	11/25/2008	236363	NORTHERN DITCH INT REHAB PH1	SCAPCREDIT		108,760
	12/31/2008	SC1011338	MAINTENANCE WORK FY09A - NORTHERN DITCH	SCAPCREDIT		11
	6/30/2009	SC1011339	MAINTENANCE WORK FY09B - NORTHERN DITCH	SCAPCREDIT		1,884
	12/31/2009	359339	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		SC1011340	MAINTENANCE WORK FY10A - NORTHERN DITCH	SCAPCREDIT		1,177
	3/5/2010	234678	THE LIGHTHOUSE PROMISE COMPLEX	LAT EXT	2,825	-6,144
	6/30/2010	SC1011343	MAINTENANCE WORK FY10B - NORTHERN DITCH	SCAPCREDIT		2,532
	12/21/2010	284728	SUBWAY - NEW CUT RD	LAT EXT	1,314	-2,858
	12/31/2010	359340	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		SC1011344	MAINTENANCE WORK FY11A - NORTHERN DITCH	SCAPCREDIT		2,456
	6/28/2011	320908	PARKVIEW ESTATES REHABILITATIO	SCAPCREDIT		36
	6/30/2011	SC1011345	MAINTENANCE WORK FY11B - NORTHERN DITCH	SCAPCREDIT		1,989
	11/11/2011	312810	WILLOW PLACE APT COMMUNITY CEN	LAT EXT	400	-870
	12/31/2011	359341	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		24,000
		359405	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
		SC1011346	MAINTENANCE WORK FY12A - NORTHERN DITCH	SCAPCREDIT		911
	1/26/2012	315723	JCPS EARLY CHILDHOOD DEVELOP	LAT EXT	6,000	-13,050
	3/21/2012	312057	DOLLAR GENERAL - MEDALLION CT	LAT EXT	400	-870
	6/30/2012	SC1011336	MAINTENANCE WORK FY12B - NORTHERN DITCH	SCAPCREDIT		7,893
	8/20/2012	312659	KROGER L-350 FUEL STATION	LAT EXT	400	-870
	12/31/2012	14SC1004	MAINTENANCE WORK FY13A - NORTHERN DITCH	SCAPCREDIT		4,239
		359343	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		24,000
	6/30/2013	SC1082570	MAINTENANCE WORK FY13 JAN-JUN-NORTH DITCH	SCAPCREDIT		6,459
	12/5/2013	13LE1147	CARLON ROOFING	LAT EXT	992	-2,158
	12/12/2013	13LE1126	JENNINGS CROSSING TRACT 3	LAT EXT	2,100	-4,568
	12/30/2013	SC1082571	MAINTENANCE WORK FY14 JUL-DEC-NORTH DITCH	SCAPCREDIT		2,707
	6/30/2014	SC1082572	MAINTENANCE WORK FY14 JAN-JUN-NORTH DITCH	SCAPCREDIT		9,044
	10/21/2014	SC1006180	CONTRACTED WORK FY14 - NORTHERN DITCH	SCAPCREDIT		5
	12/30/2014	SC1082573	MAINTENANCE WORK FY15 JUL-DEC-NORTH DITCH	SCAPCREDIT		8,330
	6/30/2015	SC1082575	MAINTENANCE WORK FY15 JAN-JUN-NORTH DITCH	SCAPCREDIT		5,564
	12/30/2015	SC1082576	MAINTENANCE WORK FY16 JUL-DEC-NORTH DITCH	SCAPCREDIT		6,074
	6/30/2016	SC1082577	MAINTENANCE WORK FY16 JAN-JUN-NORTH DITCH	SCAPCREDIT		5,519
	12/30/2016	SC1082578	MAINTENANCE WORK FY17 JUL-DEC-NORTH DITCH	SCAPCREDIT		9,266
	6/30/2017	SC1082579	MAINTENANCE WORK FY17 JAN-JUN-NORTH DITCH	SCAPCREDIT		6,441
	12/30/2017	SC1082580	MAINTENANCE WORK FY18 JUL-DEC-NORTH DITCH	SCAPCREDIT		7,810
Northern Ditch Total						274,866
ORFM	12/31/2007	359344	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359433	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		56,000
	11/1/2008	235572	MAINTENANCE WORK FY06 AUG-FY09 NOV - ORFM	SCAPCREDIT		19,826

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	12/31/2008	362643	MAINTENANCE WORK FY09A - ORFM	SCAPCREDIT		2
	6/30/2009	362650	MAINTENANCE WORK FY09B - ORFM	SCAPCREDIT		3,835
	12/31/2009	362654	MAINTENANCE WORK FY10A - ORFM	SCAPCREDIT		7,330
	5/18/2010	263548	SINGLE FAMILY CONNECTION	LAT EXT	400	-870
	6/28/2010	213488	NORTHEAST CHRISTIAN CHURCH	LAT EXT	10,000	-21,750
	6/30/2010	362660	MAINTENANCE WORK FY10B - ORFM	SCAPCREDIT		6,773
	8/30/2010	254919	TRILOGY HEALTH SERVICES, LLC	LAT EXT	8,200	-17,835
	12/31/2010	362665	MAINTENANCE WORK FY11A - ORFM	SCAPCREDIT		181
	6/30/2011	362672	MAINTENANCE WORK FY11B - ORFM	SCAPCREDIT		4,139
	9/20/2011	280837	SPRINGHURST TOWNE CTR LOT C	LAT EXT	400	-870
	9/30/2011	320920	SHADOW WOOD I/I REHABILITATION	SCAPCREDIT		14,279
	10/14/2011	311412	SPRINGHURST CHEVROLET	LAT EXT	855	-1,860
	12/31/2011	359345	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		16,000
		359434	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		16,000
		362677	MAINTENANCE WORK FY12A - ORFM	SCAPCREDIT		7,268
	3/1/2012	320921	DERINGTON COURT I/I REHABILITA	SCAPCREDIT		56,208
	3/5/2012	187028	GLENVIEW PARK SUBD SECTION 1	LAT EXT	4,400	-9,570
		213450	GLENVIEW PARK SUB, SEC 2	LAT EXT	5,600	-12,180
	3/12/2012	322455	FIRST LADY NAILS	LAT EXT	400	-870
	6/30/2012	362681	MAINTENANCE WORK FY12B - ORFM	SCAPCREDIT		19,941
		SC1011315	MAINTENANCE WORK FY12B - ORFM	SCAPCREDIT		19,941
	7/5/2012	292239	SPRINGHURST RESTAURANT/ RETAIL	LAT EXT	3,440	-7,482
	12/11/2012	323821	TIRE DISCOUNTERS WESTPORT RD	LAT EXT	400	-870
	12/18/2012	341319	RAISING CANES RETAIL CENTER	LAT EXT	1,225	-2,664
		363238	FY13 PROSPECT MANHOLE REHAB	SCAPCREDIT		72,703
	12/31/2012	359346	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		24,000
		362686	MAINTENANCE WORK FY13A - ORFM	SCAPCREDIT		1,161
		363235	FY13 MUDDY FORK MH REHAB	SCAPCREDIT		41,653
	3/12/2013	322458	KROGER L-707 STORE EXPANSION	LAT EXT	400	-870
	5/13/2013	360262	SINGLE FAMILY 3419 HILLVALE RD	LAT EXT	400	-870
	6/21/2013	343729	RETAIL & RESTAURANT	LAT EXT	3,500	-7,613
	6/30/2013	SC1082581	MAINTENANCE WORK FY13 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		279
	11/7/2013	334154	GLENVIEW PARK SUBD SEC 4	LAT EXT	3,600	-7,830
	12/30/2013	SC1082582	MAINTENANCE WORK FY14 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		1,302
	12/31/2013	13LE1024	Overlook at Beech Spring Farm Sec 4	LAT EXT	5,600	-12,180
	3/11/2014	199896	SPRINGDALE OFFICE BUILDING	LAT EXT	4,210	-9,157
	5/16/2014	225863	SPRING FARM LAKES SEC 1	LAT EXT	4,800	-10,440
	6/30/2014	SC1082583	MAINTENANCE WORK FY14 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		1,293
	9/22/2014	177756	SUMMIT GARDENS PHASE 1	LAT EXT	32,000	-69,600
	11/10/2014	14LE1121	Riverside Sewer Extension	LAT EXT	1,200	-2,610
	12/30/2014	SC1082584	MAINTENANCE WORK FY15 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		4,394
	12/31/2014	SC1006181	CONTRACTED WORK FY14 - ORFM	SCAPCREDIT		1,654
	1/16/2015	13LE1071	SPRING FARM LAKE SEC 2	LAT EXT	6,000	-13,050
	2/12/2015	352634	BAUER PROPERTY	LAT EXT	2,920	-6,351

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	6/30/2015	SC1082585	MAINTENANCE WORK FY15 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		2,547
	7/12/2015	SC983704	PROSPECT I&I REHABILITATION - FY13 PHASE IA	SCAPCREDIT		1,034,758
	8/5/2015	SC1003730	RIVER ROAD I/I REMEDIATION	SCAPCREDIT		120,418
	10/21/2015	LE929244	Summit Gardens Phase 2	LAT EXT	18,000	-39,150
	11/19/2015	SC1006195	CONTRACTED WORK FY15 - ORFM	SCAPCREDIT		1
	12/14/2015	LE938166	Spring Farm Lake Section 3	LAT EXT	3,200	-6,960
	12/30/2015	SC1082586	MAINTENANCE WORK FY16 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		1,478
	6/30/2016	SC1082587	MAINTENANCE WORK FY16 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		460
		SC1082589	MAINTENANCE WORK FY17 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		3,171
	8/10/2016	SC1003696	CONTRACTED WORK FY16 - ORFM	SCAPCREDIT		17,566
	10/6/2016	SC1003728	PROSPECT I&I REHABILITATION - FY16 PHASE IB	SCAPCREDIT		199,036
	11/16/2016	LE923204	Indian Springs Hotel	LAT EXT	13,000	-28,275
	6/30/2017	SC1082590	MAINTENANCE WORK FY17 JAN-JUN-OHIO RIVER FORCE MAI	SCAPCREDIT		1,630
	12/30/2017	SC1082592	MAINTENANCE WORK FY18 JUL-DEC-OHIO RIVER FORCE MAI	SCAPCREDIT		3,330
	12/6/2019	LE971285	Cityscape - Simcoe Lane	LAT EXT	66,700	-145,073
ORFM Total						1,347,707
Pond Creek	11/1/2008	235574	MAINTENANCE WORK FY06 AUG-FY09 NOV - POND CREEK	SCAPCREDIT		71,782
	12/31/2008	359347	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359438	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
		SC1011298	MAINTENANCE WORK FY09A - POND CREEK	SCAPCREDIT		1,913
	6/30/2009	SC1011299	MAINTENANCE WORK FY09B - POND CREEK	SCAPCREDIT		6,403
	12/31/2009	359348	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359439	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		12,000
		SC1011305	MAINTENANCE WORK FY10A - POND CREEK	SCAPCREDIT		22,337
	2/17/2010	192513	BANNON CROSSINGS SECTION 3A-1	LAT EXT	800	-1,740
	3/26/2010	219734	DSL LIFE LONG LEARNING CENTER	LAT EXT	900	-1,958
	4/27/2010	261115	EMERGENCY RESTORATION	LAT EXT	400	-870
	6/30/2010	SC1011307	MAINTENANCE WORK FY10B - POND CREEK	SCAPCREDIT		11,060
	10/13/2010	276977	DADISMAN BUILDERS-POPLAR TREE	LAT EXT	400	-870
	12/1/2010	266833	THORNTONS @ PRESTON HWY	LAT EXT	400	-870
	12/29/2010	280751	NOTTINGTON HILLS SEC 1	LAT EXT	4,400	-9,570
	12/31/2010	359350	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		SC1011308	MAINTENANCE WORK FY11A - POND CREEK	SCAPCREDIT		19,773
	1/13/2011	187739	GLENGARRY INDUSTRIAL PARK	LAT EXT	4,300	-9,353
	3/21/2011	277777	TIRE DISCOUNTERS - BOERSTE WAY	LAT EXT	2,960	-6,438
	6/30/2011	SC1011309	MAINTENANCE WORK FY11B - POND CREEK	SCAPCREDIT		10,562
	9/14/2011	304408	UPS SUPPLY CHAIN SOLUTIONS #7	LAT EXT	2,250	-4,894
	9/27/2011	320918	EDSEL I/I REHABILITATION - FY1	SCAPCREDIT		106,700
	11/4/2011	313444	PLANET FITNESS - JEFF BLVD	LAT EXT	1,600	-3,480
	11/29/2011	312391	LONGHORN STEAKHOUSE RESTAURANT	LAT EXT	4,840	-10,527
	12/29/2011	320919	LANTANA I/I REHABILITATION - F	SCAPCREDIT		5,000
	12/31/2011	359351	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		20,000
		SC1011310	MAINTENANCE WORK FY12A - POND CREEK	SCAPCREDIT		5,380

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	2/28/2012	310845	ZAXBY'S RESTAURANT	LAT EXT	3,750	-8,156
	3/13/2012	255044	ISA-RECYCLING CENTER	LAT EXT	400	-870
	3/19/2012	312814	MILLER TRANSPORTATION	LAT EXT	1,800	-3,915
	4/16/2012	324554	NORTONS TEMPORARY OFFICE	LAT EXT	900	-1,958
	6/19/2012	234102	ETHOS AT VALLEY FARM SR LIVING	LAT EXT	7,050	-15,334
	6/21/2012	322367	SHEPHERDS CARE MEMORY HOME	LAT EXT	2,000	-4,350
	6/30/2012	SC1011313	MAINTENANCE WORK FY12B - POND CREEK	SCAPCREDIT		3,877
	8/6/2012	307332	LOUISVILLE INDUSTRIAL BLDG B	LAT EXT	2,520	-5,481
	8/10/2012	279860	BANNON CROSSINGS SEC 3B-2	LAT EXT	9,600	-20,880
		SC1005684	CONTRACTED WORK FY12 - POND CREEK	SCAPCREDIT		3,812
	8/13/2012	312053	DOLLAR GENERAL - CLEARWATER FA	LAT EXT	400	-870
	10/12/2012	343455	SINGLE FAMILY 1812 GREYLING DR	LAT EXT	400	-870
	11/9/2012	243109	OVERBROOK APARTMENTS	LAT EXT	41,200	-89,610
	12/31/2012	14SC1005	MAINTENANCE WORK FY13A - POND CREEK	SCAPCREDIT		25,984
		359354	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		56,000
	2/20/2013	329624	COPART	LAT EXT	400	-870
	5/2/2013	346082	ZAXBYS	LAT EXT	2,065	-4,491
	6/30/2013	320924	LEA ANN WAY INTERCEPTOR I&I RE	SCAPCREDIT		1,017,423
		SC1082593	MAINTENANCE WORK FY13 JAN-JUN-POND CREEK	SCAPCREDIT		41,995
	7/2/2013	335385	HARRISON LOW PRESSURE S/S	LAT EXT	1,600	-3,480
	7/12/2013	SC1005534	PICADILLY I/I REHABILITATION FY13	SCAPCREDIT		187,564
	8/16/2013	320940	4 RESIDENCE SFU 7821 MANSLICK	LAT EXT	400	-870
	8/27/2013	SC1005538	CONTRACTED WORK FY13 - POND CREEK	SCAPCREDIT		18,958
	9/6/2013	324886	PNC BANK	LAT EXT	400	-870
		361336	RENAISSANCE SOUTH BUSINESS	LAT EXT	540	-1,175
	9/26/2013	13LE1083	SINGLE FAMILY HOME 5402 (H) E MANSLICK RD	LAT EXT	400	-870
	11/12/2013	SC1005319	FEGENBUSH I/I REHABILITATION FY13	SCAPCREDIT		226,201
	12/9/2013	353125	PEGASUS TRANSPORTATION	LAT EXT	250	-544
	12/10/2013	308206	APPLEGATE FARMS	LAT EXT	57,200	-124,410
		341439	PRESTON GARDENS APTS	LAT EXT	22,200	-48,285
	12/30/2013	SC1082594	MAINTENANCE WORK FY14 JUL-DEC-POND CREEK	SCAPCREDIT		19,491
	2/14/2014	13LE1179	TIMBERBEND SUBDIVISION SEC 5B	LAT EXT	6,400	-13,920
	4/10/2014	13LE1035	RENAISSANCE SOUTH BUSINESS PARK TRACT 4	LAT EXT	5,415	-11,778
	4/24/2014	348014	ASHTON PARK TOWN HOMES	LAT EXT	9,000	-19,575
	5/16/2014	280180	LOUISVILLE INDUSTRIAL CTR F	LAT EXT	2,480	-5,394
	5/28/2014	14LE1085	Williams Properties - Self Storage Facility	LAT EXT	400	-870
	6/9/2014	13LE1034	6300 GEIL LANE WAREHOUSE	LAT EXT	720	-1,566
	6/30/2014	SC1082595	MAINTENANCE WORK FY14 JAN-JUN-POND CREEK	SCAPCREDIT		14,457
	7/7/2014	284215	HURSTBOURNE POINTE APTS	LAT EXT	9,600	-20,880
	8/25/2014	344230	AUSTIN PARK APARTMENTS PH6	LAT EXT	27,600	-60,030
	11/13/2014	13LE1105	JEFFERSON COMMONS	LAT EXT	17,075	-37,138
	11/18/2014	SC1005323	FERN CREEK I/I REHABILITATION FY13	SCAPCREDIT		551,108
	12/30/2014	SC1082596	MAINTENANCE WORK FY15 JUL-DEC-POND CREEK	SCAPCREDIT		26,095
	1/13/2015	13LE1017	APEX ON PRESTON APT HOMES(Formally CITYSCAPE APTS	LAT EXT	84,400	-183,570

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	3/10/2015	SC1005541	STONY BROOK I/I REHABILITATION FY13	SCAPCREDIT		345,397
	3/11/2015	SC995942	CAVEN AVE I/I REMEDIATION - FY13	SCAPCREDIT		225,645
	4/29/2015	354207	COOPER FARMS SEC 11B	LAT EXT	12,400	-26,970
		354209	COOPER FARMS SEC 11A	LAT EXT	13,200	-28,710
	6/30/2015	SC1082597	MAINTENANCE WORK FY15 JAN-JUN-POND CREEK	SCAPCREDIT		10,279
	8/25/2015	13LE1086	WOODS OF PENN RUN OFFSITE SS	LAT EXT	1,000	-2,175
	10/2/2015	13LE1140	JEFFERSON POST APARTMENTS	LAT EXT	28,800	-62,640
	12/30/2015	14LE1116	CATALPA SPRINGS	LAT EXT	2,800	-6,090
		SC1082598	MAINTENANCE WORK FY16 JUL-DEC-POND CREEK	SCAPCREDIT		13,994
	12/31/2015	SC939830	Lea Ann Way West Quad 1 & 2 Rehabilitation Project	SCAPCREDIT		445,911
	2/4/2016	13LE1056	MORNING POINTE AT HURSTBOURNE	LAT EXT	13,000	-28,275
	2/12/2016	358356	WOODS OF PENN RUN Section 1	LAT EXT	18,800	-40,890
	5/17/2016	SC1003699	CONTRACTED WORK FY16 - POND CREEK	SCAPCREDIT		36,063
	6/6/2016	LE936598	Jefferson Commerce Center Tract 1A	LAT EXT	5,250	-11,419
	6/21/2016	14LE1170	Austin Park Phase 7 & 8	LAT EXT	26,400	-57,420
		LE918484	AUSTIN PARK SS PHASE 8	LAT EXT	16,800	-36,540
	6/30/2016	SC1082599	MAINTENANCE WORK FY16 JAN-JUN-POND CREEK	SCAPCREDIT		12,650
	8/5/2016	SC1003087	HILLRIDGE I/I REMEDIATION	SCAPCREDIT		308,184
	8/31/2016	SC1003292	LEA ANN WAY WEST (LAWW) QUAD 3 I/I REMEDIATION	SCAPCREDIT		311,526
	10/24/2016	SC1006197	CONTRACTED WORK FY15 - POND CREEK	SCAPCREDIT		310
	10/26/2016	SC1006182	CONTRACTED WORK FY14 - POND CREEK	SCAPCREDIT		8,390
	10/31/2016	SC1005631	LEA ANN WAY WEST (LAWW) QUAD 4 I/I REHABILITATION	SCAPCREDIT		692,905
		SC1005639	SILVER HEIGHTS SEWER REHAB	SCAPCREDIT		284,936
	12/30/2016	SC1082601	MAINTENANCE WORK FY17 JUL-DEC-POND CREEK	SCAPCREDIT		14,699
	1/17/2017	LE942402	Preston Crossing Apartments	LAT EXT	46,400	-100,920
	2/2/2017	LE954229	Jeffeerson Commerce Center Bldg.2	LAT EXT	3,150	-6,851
	6/30/2017	SC1082602	MAINTENANCE WORK FY17 JAN-JUN-POND CREEK	SCAPCREDIT		14,076
	7/6/2017	LE967615	Cooper Farms Section 12	LAT EXT	21,200	-46,110
	12/30/2017	SC1082603	MAINTENANCE WORK FY18 JUL-DEC-POND CREEK	SCAPCREDIT		10,803
	6/30/2018	SC1096902	Admiral PS I/I Rehab FY17 FY18	SCAPCREDIT		977,768
	6/10/2019	LE1047077	Orell Station 1C	LAT EXT	10,400	-22,620
	7/10/2019	LE1053368	Ferndale Place Subdivision	LAT EXT	9,600	-20,880
	11/22/2019	LE1048948	Estates of St Anthony Sec 3	LAT EXT	4000	-8,700
Pond Creek Total						4,972,751
SE Diversion	12/31/2007	359355	CALENDAR 2007 SUMP PUMP CREDIT	SCAPCREDIT		8,000
		359440	CALENDAR 2007 DOWNSPOUT CREDIT	SCAPCREDIT		128,000
	11/1/2008	235575	MAINTENANCE WORK FY06 AUG-FY09 NOV - SE DIVERSION	SCAPCREDIT		71,472
	12/22/2008	236214	GOLDSMITH BUECHB ICA PHI REHAB	SCAPCREDIT		314,808
		236296	BEARGRASS INT REHAB PH1 SEDIV	SCAPCREDIT		122,688
	12/31/2008	359356	CALENDAR 2008 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359441	CALENDAR 2008 DOWNSPOUT CREDIT	SCAPCREDIT		16,000

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
		SC1011317	MAINTENANCE WORK FY09A - SE DIVERSION	SCAPCREDIT		1,555
	6/30/2009	SC1011318	MAINTENANCE WORK FY09B - SE DIVERSION	SCAPCREDIT		2,929
	10/20/2009	229854	TINY HANDS DAYCARE	LAT EXT	1,225	-2,664
	12/31/2009	359357	CALENDAR 2009 SUMP PUMP CREDIT	SCAPCREDIT		12,000
		359443	CALENDAR 2009 DOWNSPOUT CREDIT	SCAPCREDIT		8,000
		SC1011322	MAINTENANCE WORK FY10A - SE DIVERSION	SCAPCREDIT		16,974
	2/11/2010	235291	SULLIVAN COLLEGE OF TECHNOLOGY	LAT EXT	900	-1,958
	3/1/2010	238328	LOUISVILLE COLLEGIATE SPORTS	LAT EXT	400	-870
	3/5/2010	241759	FRISCHS BIG BOY RESTAURANT	LAT EXT	2,400	-5,220
	4/16/2010	257275	LOUISVILLE JUNIOR ACADEMY	LAT EXT	520	-1,131
	6/30/2010	SC1011326	MAINTENANCE WORK FY10B - SE DIVERSION	SCAPCREDIT		10,739
	12/14/2010	320993	BEARGRASS CREEK PHASE II - FY1	SCAPCREDIT		10,368
	12/31/2010	359358	CALENDAR 2010 SUMP PUMP CREDIT	SCAPCREDIT		4,000
		359444	CALENDAR 2010 DOWNSPOUT CREDIT	SCAPCREDIT		24,000
		SC1011328	MAINTENANCE WORK FY11A - SE DIVERSION	SCAPCREDIT		11,090
	2/16/2011	286513	GARDINER POINT RESIDENCE HALL	LAT EXT	10,800	-23,490
	5/6/2011	276378	TIRE DISCOUNTERS - BARDSTOWN	LAT EXT	1,500	-3,263
	5/30/2011	287888	BEVERAGE WAREHOUSE	LAT EXT	1,180	-2,567
	6/30/2011	SC1011330	MAINTENANCE WORK FY11B - SE DIVERSION	SCAPCREDIT		3,661
	7/1/2011	296295	KEN TOWERY -3800 S HURSTBOURNE	LAT EXT	400	-870
	12/31/2011	359359	CALENDAR 2011 SUMP PUMP CREDIT	SCAPCREDIT		64,000
		359445	CALENDAR 2011 DOWNSPOUT CREDIT	SCAPCREDIT		8,000
		SC1011331	MAINTENANCE WORK FY12A - SE DIVERSION	SCAPCREDIT		5,071
	6/30/2012	SC1011316	MAINTENANCE WORK FY12B - SE DIVERSION	SCAPCREDIT		24,202
		SC1011333	MAINTENANCE WORK FY12B - SE DIVERSION	SCAPCREDIT		6,141
	8/10/2012	307018	HOOK PROPERTY FAMILY DOLLAR	LAT EXT	400	-870
	12/31/2012	14SC1006	MAINTENANCE WORK FY13A - SE DIVERSION	SCAPCREDIT		24,202
		359361	CALENDAR 2012 SUMP PUMP CREDIT	SCAPCREDIT		68,000
		359446	CALENDAR 2012 DOWNSPOUT CREDIT	SCAPCREDIT		4,000
	3/11/2013	187741	BROOKSTONE SENIOR APARTMENTS	LAT EXT	16,800	-36,540
	6/14/2013	232601	RAINTREE/MARIAN CT P/S ELIM	LAT EXT	105,800	-230,115
	6/30/2013	SC1082605	MAINTENANCE WORK FY13 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		21,761
	9/18/2013	SC1005539	CONTRACTED WORK FY13 - SOUTHEAST DIVERSION	SCAPCREDIT		25,344
	11/26/2013	330437	COLLEGIATE ATHLETIC FIELD	LAT EXT	800	-1,740
	12/30/2013	SC1082606	MAINTENANCE WORK FY14 JUL-DEC-SOUTHEAST DIVERSION	SCAPCREDIT		19,491
	6/30/2014	SC1082607	MAINTENANCE WORK FY14 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		9,087
	12/30/2014	SC1082608	MAINTENANCE WORK FY15 JUL-DEC-SOUTHEAST DIVERSION	SCAPCREDIT		15,321
	2/11/2015	SC1006185	CONTRACTED WORK FY14 - SOUTHEAST DIVERSION	SCAPCREDIT		187,478
	6/30/2015	SC1082610	MAINTENANCE WORK FY15 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		10,273
	10/20/2015	SC1006199	CONTRACTED WORK FY15 - SOUTHEAST DIVERSION	SCAPCREDIT		1
	12/22/2015	LE919560	Todd's Place Express Car Wash	LAT EXT	4,830	-10,505

CREDIT BASIN	RELEASE DATE	APPLICATION	APPLICATION NAME	TYPE	FLOW	SUM OF APPROVED CREDIT REQUIRED / FLOW REDUCTION
	12/30/2015	SC1082611	MAINTENANCE WORK FY16 JUL-DEC-SOUTHEAST DIVERSION	SCAPCREDIT		7,052
	2/16/2016	SC1003718	SOUTHEAST DIVERSION AREA G (SEDG) I/I REMEDIATION	SCAPCREDIT		75,998
	5/24/2016	SC1003704	CONTRACTED WORK FY16 - SOUTHEAST DIVERSION	SCAPCREDIT		66
	6/30/2016	SC1082612	MAINTENANCE WORK FY16 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		19,904
	7/28/2016	LE943171	Costco Wholesale and Fuel Facility	LAT EXT	8,000	-17,400
	12/30/2016	SC1082613	MAINTENANCE WORK FY17 JUL-DEC-SOUTHEAST DIVERSION	SCAPCREDIT		5,812
	6/30/2017	SC1082614	MAINTENANCE WORK FY17 JAN-JUN-SOUTHEAST DIVERSION	SCAPCREDIT		6,961
	12/30/2017	SC1082615	MAINTENANCE WORK FY18 JUL-DEC-SOUTHEAST DIVERSION	SCAPCREDIT		14,909
SE Diversion Total						1,054,155
Grand Total						14,810,045

Appendix E IOAP Project Crosswalk

PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
17TH ST FPS DWO ELIMINATION	IOAP	MSD0306-FP	L_OR_MF_190_S_03_A_A
27TH STREET FPS DWO ELIM	IOAP	MSD0307-FP	L_OR_MF_019_S_03_A_A
34TH ST FPS DWO ELIMINATION	IOAP	MSD0308-FP	L_OR_MF_019_S_03_A_B
4TH STREET FPS DWO ELIMINATION	IOAP	MSD0303-FP	L_OR_MF_022_M_03_A_A
ADAMS STREET SEWER SEPARATION (FORMERLY STORAGE BASIN)	IOAP	CSO172	L_OR_MF_172_S_09B_B_A_0
ANCHOR ESTATES PS ELIMINATIONS 1 - VANNAH PUMP STATION ELIMINATION	IOAP	01106	S_MI_MF_NB06_M_01_A_A-2
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	00056-W	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	0057-W	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	00746	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	00817	S_MI_MF_NB06_M_01_A_A - 1
ANCHOR ESTATES PS ELIMINATIONS 2 - ANCHOR ESTATES #1 AND #2 PUMP STATION ELIMINATION	IOAP	MSD0057-LS	S_MI_MF_NB06_M_01_A_A - 1
ASHBURTON PS IMPROVEMENTS & DIVERSION	IOAP	MSD0165-PS	S_FF_FF_NB03_M_01_C_A
ASHBURTON PS IMPROVEMENTS & DIVERSION	IOAP	MSD0166-PS	S_FF_FF_NB03_M_01_C_A
AVANTI PS ELIMINATION	IOAP	21229	S_PO_WC_PC07_M_01_A
BARDSTOWN RD PS IMPROVEMENTS	IOAP	88545	S_CC_CC_MSD1025_S_03_B
BEARGRASS INTERCEPTOR REHABILITATION PH 2	IOAP	51594	S_SD_MF_NB06_S_13_C
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21061	BEECHWOOD VILLAGE SEWER REPL
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21089	BEECHWOOD VILLAGE SEWER REPL
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21089A	BEECHWOOD VILLAGE SEWER REPL
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21101	BEECHWOOD VILLAGE SEWER REPL
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21153	BEECHWOOD VILLAGE SEWER REPL
BEECHWOOD VILLAGE SEWER REPL	ISSDP	21156	BEECHWOOD VILLAGE SEWER REPL
BELLS LANE (FORMERLY PADDY'S RUN) WET WEATHER TREATMENT FACILITY	IOAP	CSO015	L_OR_MF_015_M_13_B_B_8
BELLS LANE (FORMERLY PADDY'S RUN) WET WEATHER TREATMENT FACILITY	IOAP	CSO191	L_OR_MF_015_M_13_B_B_8
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	08717	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	104223	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	104224	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	104231	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	13931	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	13943	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	13946	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	34093542	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	36763	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	44396	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	44397	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	51301	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	66349	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	99259	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	KK14815019	S_SF_MF_30917_M_09_A
CAMP TAYLOR SYSTEM IMPROVEMENT PHASE 1 - SSES	IOAP	KK14855239	S_SF_MF_30917_M_09_A
CAVEN AVENUE PS ELIMINATION	IOAP	17724	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	27116	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	61667	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	61687	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	70212	S_PO_WC_PC09_M_09B_C
CAVEN AVENUE PS ELIMINATION	IOAP	MSD0133-PS	S_PO_WC_PC09_M_09B_C

PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO028	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO029	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO034	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO036	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO178	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO181	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO193	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO195	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO196	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO197	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO199	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO200X	L_OR_MF_155_M_09B_B_B_4-1
CENTRAL RELIEF DRAIN CSO IN-LINE STORAGE, GREEN INFRASTRUCTURE, AND DISTRIBUTED STORAGE	IOAP	CSO202	L_OR_MF_155_M_09B_B_B_4-1
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25477	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25479	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	25480	S_PO_WC_PC03_M_01_C
CHARLESWOOD INTERCEPTOR EXTENSION	IOAP	MSD0130-PS	S_PO_WC_PC03_M_01_C
CINDERELLA PS ELIMINATION	IOAP	102339	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	35309	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	60679	S_PO_WC_PC04_M_01_C
CINDERELLA PS ELIMINATION	IOAP	MSD1013-PS	S_PO_WC_PC04_M_01_C
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO083	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO088	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO131	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO132	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO154	L_MU_MF_154_M_09B_B_A_8
CLIFTON HEIGHTS STORAGE BASIN	IOAP	CSO167	L_MU_MF_154_M_09B_B_A_8
CSO058 IN-LINE STORAGE & GREEN INFRASTRUCTURE	IOAP	CSO058	L_OR_MF_058_S_08_A_A_0
CSO093 STRUCTURAL MODIFICATIONS & GREEN INFRASTRUCTURE	IOAP	CSO093	L_SO_MF_093_S_08_A_A_0
CSO108 DAM MODIFICATION	IOAP	CSO108	L_SO_MF_108_S_09A_B_A_4
CSO140 IN-LINE STORAGE & GREEN INFRASTRUCTURE	IOAP	CSO140	L_MI_MF_140_S_08_A_A_0
CSO160 SEWER SEPARATION	IOAP	CSO160	L_OR_MF_160_S_08_A_A_0
CSO190 GREEN INFRASTRUCTURE (FORMERLY18TH & NORTHWESTERN PKWY STORAGE BASIN)	IOAP	CSO190	L_OR_MF_190_S_09B_B_A_8
CSO206 SEWER SEPARATION	IOAP	CSO206	L_MI_MF_206_S_08_A_A_0
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	104289	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28249	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28250	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28336	S_JT_JT_NB02_M_01_C
DELL RD/CHARLANE PKWY INTERCEPTOR IMPROVEMENTS	IOAP	28340	S_JT_JT_NB02_M_01_C

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

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

PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	47656	S_MI_MF_NB07_S_07_C
HURSTBOURNE I/I INVESTIGATION & REHABILITATION	IOAP	67535	S_MI_MF_NB07_S_07_C
IDLEWOOD IN-LINE STORAGE	IOAP	28984	S_CC_CC_70158_M_09A_C
IDLEWOOD IN-LINE STORAGE	IOAP	28985	S_CC_CC_70158_M_09A_C
IDLEWOOD IN-LINE STORAGE	IOAP	28998	S_CC_CC_70158_M_09A_C
IDLEWOOD IN-LINE STORAGE	IOAP	63094	S_CC_CC_70158_M_09A_C
IDLEWOOD IN-LINE STORAGE	IOAP	63095	S_CC_CC_70158_M_09A_C
IDLEWOOD IN-LINE STORAGE	IOAP	70158	S_CC_CC_70158_M_09A_C
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28173	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28390	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28391	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28392	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28395	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	28551	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	31733	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	64505	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	IS028-SI	S_JT_JT_NB01_M_01_C_A
JEFFERSONTOWN WQTC ELIMINATION	IOAP	MSD0255	S_JT_JT_NB01_M_01_C_A
KAVANAUGH RD PS IMPROVEMENTS	IOAP	MSD1085-PS	S_HC_HC_MSD1085_S_03_A
KLONDIKE INTERCEPTOR	IOAP	20644	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	25676	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	26650	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	26651	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	49513	S_SD_MF_NB04_S_01_B_A
KLONDIKE INTERCEPTOR	IOAP	66232	S_SD_MF_NB04_S_01_B_A
LAKE FOREST PS SSO INVESTIGATION	IOAP	MSD1169-LS	S_FF_LF_NB01_S_13_C_A
LANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	25484	S_PO_WC_PC05_M_07_C
LANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	93719	S_PO_WC_PC05_M_07_C
LANTANA #1 PS I/I INVESTESTIGATION & REHABILITATION	IOAP	MSD0101-PS	S_PO_WC_PC05_M_07_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	19360	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	19369	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	29933	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	29943	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	29948	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	29949	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	31073	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	31074	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	31083	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	31084	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	57874	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	61266	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	79076	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	MSD1010-PS	S_PO_WC_PC08_M_01_C
LEA ANN WAY SYSTEM IMPROVEMENT	IOAP	MSD1200-PS	S_PO_WC_PC08_M_01_C
LELAND RD SSO INVESTIGATION	IOAP	96020	S_OR_MF_NB02_S_13_C
LEVEN PS ELIMINATION	IOAP	36419	S_PO_WC_PC10_M_01_C
LEVEN PS ELIMINATION	IOAP	MSD1019-PS	S_PO_WC_PC10_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	67997	S_CC_CC_67997_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	67999	S_CC_CC_67997_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	86423	S_CC_CC_67997_M_01_C

PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	86424	S_CC_CC_67997_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	89196	S_CC_CC_67997_M_01_C
LITTLE CEDAR CREEK INTERCEPTOR IMPROVEMENTS	IOAP	89197	S_CC_CC_67997_M_01_C
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO091	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO097	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO106	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO110	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO111	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO113	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO137	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO146	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO148	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO149	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO151	L_SO_MF_092_M_09B_B_D_8
LOGAN & BRECKINRIDGE ST STORAGE BASIN	IOAP	CSO152	L_SO_MF_092_M_09B_B_D_8
LUCAS LN PS IN-LINE STORAGE	IOAP	MSD0199-LS	S_FF_BT_NB01_S_09A_C_A
MEADOW STREAM PS & FM UPGRADE	IOAP	91087	S_HC_HC_MSD1082_S_09A_C
MEADOW STREAM PS & FM UPGRADE	IOAP	MSD1082-PS	S_HC_HC_MSD1082_S_09A_C
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	24152-W	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	24472	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	26752	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	41374	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	41416	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0006-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0007-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0010-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0023-PS	S_OR_MF_NB01_M_01_B-1
MELLWOOD SYSTEM IMPROVEMENTS AND PS ELIMINATIONS 1 - MELLWOOD PS AND FM IMPROVEMENTS	IOAP	MSD0024-PS	S_OR_MF_NB01_M_01_B-1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	02932	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	02933	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	02935	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	08537	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	08935-SM	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	115183	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	115184	S_MISF_MF_NB01_M_01_C_A1
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE AND UMFPS DIVERSION 1 - BUECHEL BASIN	IOAP	115185	S_MISF_MF_NB01_M_01_C_A1

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

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

PROJECT NAME	PROGRAM	ASSET ID	PROJECT ID
PROSPECT SYSTEM IMPROVEMENTS 1 - WQTC ELIMINATIONS	IOAP	MSD1063-PS	S_OR_MF_NB04_M_03_B_B-1
PROSPECT SYSTEM IMPROVEMENTS 3 - ORFM SYSTEM IMPROVEMENTS	IOAP	89641	S_OR_MF_NB04_M_03_B_B-3
RAINTREE DRIVE AND MARIAN COURT SYSTEM IMPROVEMENTS PHASE 1 - PUMP STATION ELIMINATION	IOAP	28729-W	S_JT_JT_NB03_M_01_C-1
RAINTREE DRIVE AND MARIAN COURT SYSTEM IMPROVEMENTS PHASE 1 - PUMP STATION ELIMINATION	IOAP	MSD0149-PS	S_JT_JT_NB03_M_01_C-1
RIDING RIDGE PS IMPROVEMENTS	IOAP	MSD1060-LS	S_HC_HN_NB01_S_03_C_A
RUNNING FOX PS ELIMINATION	IOAP	MSD1080-LS	S_CC_CC_MSD1080_S_01_C
SHAWNEE FPS DWO ELIMINATION	IOAP	MSD0309-FP	L_OR_MF_189_M_03_A_A
SHIVELY INTERCEPTOR	IOAP	04498	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	04542	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	81814-W	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0016-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0043-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0044-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0047-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0049-PS	S_MC_WC_NB01_M_01_A
SHIVELY INTERCEPTOR	IOAP	MSD0050-PS	S_MC_WC_NB01_M_01_A
SINKING FORK INTERCEPTOR	IOAP	21103	SINKING FORK RELIEF SEWER
SINKING FORK INTERCEPTOR	IOAP	25012	SINKING FORK RELIEF SEWER
SINKING FORK INTERCEPTOR	IOAP	63319	SINKING FORK RELIEF SEWER
SONNE PS I&I INVESTIGATION & REHABILITATION	IOAP	MSD0042-PS	S_OR_MF_42007_S_07_C
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08426	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08427	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08430	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	08431	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	18654	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30680	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30681	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30701	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30702	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	30704	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	49647	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	63779	SOUTHEASTERN DIVERSION STRUCT
SOUTHEASTERN DIVERSION STRUCTURE & INTERCEPTOR	IOAP	72571-X	SOUTHEASTERN DIVERSION STRUCT
SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD STREET (SOR1) (FORMERLY ALGONQUIN PKWY STORAGE BASIN)	IOAP	CSO016	L_OR_MF_211_M_13_B_A_8__
SOUTHERN OUTFALL IN-LINE STORAGE AT 43RD STREET (SOR1) (FORMERLY ALGONQUIN PKWY STORAGE BASIN)	IOAP	CSO210	L_OR_MF_211_M_13_B_A_8__
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO104	L_OR_MF_105_M_13_B_A_0
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO105	L_OR_MF_105_M_13_B_A_0
SOUTHWESTERN PKWY CSO BASIN	IOAP	CSO189X	L_OR_MF_105_M_13_B_A_0
ST RENE RD PS IN-LINE STORAGE	IOAP	94187	S_FF_CH_NB01_S_09A_C_A
SUTHERLAND INTERCEPTOR	IOAP	16649	S_SD_MF_NB05_M_01_A
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO022	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO023	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO050	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO051	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO052	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO053	L_OR_MF_155_M_09B_B_B_4
WATERWAY PROTECTION TUNNEL (FORMERLY 13TH ST/ROWAN ST STORAGE BASIN)	IOAP	CSO054	L_OR_MF_155_M_09B_B_B_4

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

Appendix F CSO Flow Monitoring Quality Improvement

Table F-1. Phase 1 CSOs

CSO	FINAL SOP COMPLETED	HISTORICAL VOLUME REVISED	PROGRAMMING CHANGES COMPLETED	EQUIPMENT CHANGES COMPLETED	TESTING / VERIFICATION COMPLETED
015	6/30/2017	6/30/2017	UNDER CONSTRUCTION	UNDER CONSTRUCTION	UNDER CONSTRUCTION
016	7/1/2019	42916	7/30/2018	N/A	9/10/2018
018	43647	42916	9/13/2017	N/A	3/11/2019
020	43647	42916	9/21/2017	N/A	10/10/2017
036	43647	42916	8/23/2017	N/A	9/14/2017
054	43647	42916	9/8/2017	N/A	9/12/2017
058	43647	42916	3/4/2019	N/A	2/16/2019
088	6/30/2017	42916	8/23/2017	43636	43518
093	7/1/2019	42916	11/19/2018	N/A	1/1/2018
104	43647	42916	8/16/2017	N/A	9/12/2017
105	43647	42916	42963	N/A	9/12/2017
106	43647	42916	N/A	N/A	N/A
108	43647	42916	11/21/2017	10/17/2017	12/1/2018
109	43647	42916	43060	10/13/2017	10/8/2018
110	6/30/2017	42916	11/19/2018	UNDER CONSTRUCTION	4/5/2019
118	7/1/2019	42916	N/A	9/1/2017	9/12/2017
121	43647	42916	9/12/2017	10/13/2017	12/21/2017
125	43647	42916	9/8/2017	8/7/2017	9/8/2017
126	43647	42916	9/14/2017	9/1/2017	12/21/2017
127	43647	42916	N/A	N/A	N/A
130	43647	42916	8/16/2017	N/A	3/11/2019
132	43647	42916	9/8/2017	9/1/2017	9/21/2017
140	43647	42916	11/21/2017	10/13/2017	3/16/2019
146	6/30/2017	42916	11/19/2018	UNDER CONSTRUCTION	3/12/2019
149	42916	42916	43423	UNDER CONSTRUCTION	3/12/2019
154	7/1/2019	42916	12/1/2017	9/1/2017	3/21/2018
160	43647	42916	8/23/2017	9/20/2017	12/22/2017
166	43647	42916	9/12/2017	10/9/2017	12/21/2017
167	43647	42916	9/8/2017	N/A	12/21/2017
189	43647	42916	8/16/2017	N/A	9/21/2017
190	43647	42916	1/26/2018	N/A	1/26/2018
191	6/30/2017	42916	UNDER CONSTRUCTION	UNDER CONSTRUCTION	UNDER CONSTRUCTION
206	7/1/2019	42916	N/A	11/22/2017	12/6/2017
210	43647	42916	1/23/2019	N/A	1/23/2019
211	43647	42916	8/16/2017	N/A	3/1/2019

Table F-2. Phase 2 CSOs

CSO	FINAL SOP COMPLETED	HISTORICAL VOLUME REVISED	PROGRAMMING CHANGES COMPLETED	EQUIPMENT CHANGES COMPLETED	TESTING / VERIFICATION COMPLETED
019	6/28/2019	COMPLETED	UNDER CONSTRUCTION	UNDER CONSTRUCTION	STARTED
022	43644	COMPLETED	12/17/2018	N/A	COMPLETED
023	43644	COMPLETED	43451	N/A	COMPLETED
027	43644	COMPLETED	1/14/2019	6/6/2019	COMPLETED
028	43644	COMPLETED	5/3/2019	2/4/2019	COMPLETED
029	43644	COMPLETED	43588	3/22/2019	COMPLETED
031	43644	COMPLETED	3/11/2019	2/24/2019	COMPLETED
034	43644	COMPLETED	5/3/2019	2/5/2019	COMPLETED
035	43644	N/A	4/12/2019	4/12/2019	STARTED
038	43644	COMPLETED	4/22/2019	N/A	COMPLETED
050	43644	COMPLETED	6/12/2018	N/A	COMPLETED
051	43644	N/A	43263	N/A	COMPLETED
052	43644	COMPLETED	3/25/2019	3/22/2019	COMPLETED
053	43644	COMPLETED	6/20/2018	N/A	COMPLETED
055	43644	COMPLETED	6/18/2018	N/A	COMPLETED
056	43644	N/A	10/24/2017	10/24/17	COMPLETED
057	43644	N/A	6/12/2018	N/A	COMPLETED
062	43644	N/A	4/17/2019	3/16/2019	COMPLETED
082	43644	COMPLETED	6/26/2018	N/A	COMPLETED
083	43644	COMPLETED	43277	N/A	COMPLETED
084	43644	COMPLETED	6/27/2018	4/9/2019	COMPLETED
091	Started	N/A	43455	43423	STARTED
092	6/28/2019	COMPLETED	6/20/2018	N/A	COMPLETED
097	Started	COMPLETED	1/7/2019	1/1/2018	STARTED
111	Started	COMPLETED	3/12/2019	43101	STARTED
113	Started	COMPLETED	12/21/2018	11/19/2018	STARTED
117	Started	COMPLETED	43455	43423	STARTED
119	6/28/2019	COMPLETED	6/26/2018	N/A	COMPLETED
120	43644	COMPLETED	43277	N/A	COMPLETED
131	43644	N/A	10/2/2018	10/2/2018	COMPLETED
137	Started	COMPLETED	12/21/2018	N/A	COMPLETED
141	6/28/2019	N/A	5/30/2018	5/30/18	COMPLETED
144	43644	COMPLETED	6/26/2018	8/6/2018	COMPLETED
148	Started	COMPLETED	3/12/2019	1/1/2018	STARTED
150	6/28/2019	N/A	6/12/2018	N/A	COMPLETED
151	Started	COMPLETED	3/12/2019	1/1/2018	STARTED
152	Started	COMPLETED	43536	43101	STARTED
153	6/28/2019	COMPLETED	6/26/2018	N/A	COMPLETED
155	43644	COMPLETED	6/12/2018	N/A	COMPLETED
161	43644	N/A	43263	N/A	COMPLETED
172	43644	N/A	1/1/2018	1/1/2018	COMPLETED
178	43644	COMPLETED	4/17/2019	3/16/2019	COMPLETED
179	Started	COMPLETED	UNDER CONSTRUCTION	1/1/2018	STARTED
181	6/28/2019	COMPLETED	4/17/2019	3/16/2019	COMPLETED
193	43644	COMPLETED	6/20/2018	N/A	COMPLETED
195	43644	COMPLETED	6/22/2018	N/A	COMPLETED
196	43644	COMPLETED	43273	N/A	COMPLETED

Table F-2. Phase 2 CSOs

CSO	FINAL SOP COMPLETED	HISTORICAL VOLUME REVISED	PROGRAMMING CHANGES COMPLETED	EQUIPMENT CHANGES COMPLETED	TESTING / VERIFICATION COMPLETED
197	43644	COMPLETED	4/9/2019	8/14/2019	COMPLETED
198	43644	COMPLETED	6/26/2018	10/4/2018	COMPLETED
199	43644	COMPLETED	6/18/2018	N/A	COMPLETED
200	43644	COMPLETED	12/12/2018	12/12/2018	COMPLETED
201	43644	COMPLETED	6/22/2018	5/31/2019	COMPLETED
202	43644	COMPLETED	6/15/2018	N/A	COMPLETED
203	43644	COMPLETED	43266	N/A	COMPLETED
207	43644	COMPLETED	6/22/2018	N/A	COMPLETED
208	43644	COMPLETED	6/25/2018	5/22/2019	COMPLETED
SBR 142	43644	COMPLETED	6/8/2018	N/A	COMPLETED
SBR 174	43644	COMPLETED	43259	N/A	COMPLETED
SBR 180	43644	COMPLETED	43259	12/7/2018	COMPLETED
SBR 182	43644	COMPLETED	43259	N/A	COMPLETED
SBR 183	43644	COMPLETED	6/4/2018	N/A	COMPLETED
SBR 184	43644	COMPLETED	43255	N/A	COMPLETED
SBR 185	43644	COMPLETED	43255	N/A	COMPLETED
SBR 186	43644	COMPLETED	6/8/2018	N/A	COMPLETED
SBR 187	43644	COMPLETED	43259	N/A	COMPLETED
SBR 188	43644	COMPLETED	43259	12/7/2018	COMPLETED
SBR 205	43644	COMPLETED	43259	N/A	COMPLETED

Appendix G CSO108 Semi-Annual Report

January 30, 2020

Josh Lillpop
Natural Areas Branch Manager
Office of Kentucky Nature Preserves
Kentucky Energy and Environment Cabinet
300 Sower Boulevard, 4th Floor
Frankfort, KY 40601

Subject: CSO108 Semi-Annual Report #23

Dear Mr. Lillpop,

As required in Paragraph #2 of the document titled "Memorandum of Understanding by and between the Commonwealth of Kentucky, Office of Kentucky Nature Preserves ad the Louisville and Jefferson County Metropolitan Sewer District", MSD submits to you the MOU Semi-Annual Report #22. This report summarizes activities at the CSO108 CDS Site during the reporting period of January 1, 2019 to June 30, 2019.

Should you have any questions or comments, please feel free to contact me via email at heather.dodds@louisvillemsd.org or phone at (502) 540-6961.

Sincerely,

Heather Dodds

Heather Dodds, PE
Regulatory Compliance & Asset Management Administrator

MOU SEMI-ANNUAL REPORT #23
JULY 1, 2019 - DECEMBER 31, 2019

Introduction

The Louisville and Jefferson County Metropolitan Sewer District (MSD) has entered into a Memorandum of Understanding (MOU) with the Kentucky State Nature Preserve Commission (Commission). The MOU was signed by MSD on July 31, 2018, and by the Commission on August 10, 2018. This MOU is effective for the period starting August 1, 2018, and ending on August 1, 2028.

This is the 23rd Semi-Annual Report submitted in accordance with Paragraph 2 of the MOU. This report covers the time period of July 1, 2019 to December 31, 2019.

This Semi-Annual Report will address only those requirements considered ongoing. The initial Semi-Annual Report, MOU Semi-Annual Report #1, was comprehensive and included a response to each requirement addressed within the MOU. Please refer to the initial Semi-Annual Report for additional information not found within this document.

Work and activities undertaken by MSD and relating to the MOU are outlined in the paragraphs below.

1. Paragraph #2 of the MOU

MSD shall be diligent of this ten-year period in supplying the Commission with timely semi-annual reports on the efficacy of the CDS unit, water quality monitoring data, and any other such pertinent information. Said reports shall be provided to the Commission by January 30 and July 30 of each year.

2. MSD Response

This document is the 23rd semi-annual report to the Commission since the completion of the Project. Appendix A shows photos of the area around the CDS unit and South Fork Beargrass Creek during the reporting period.

2.1. Cleaning & Inspection Activities

The CSO108 CDS unit is inspected weekly and cleaned on an as-needed basis. During the reporting period, MSD cleaned the CDS Unit bar racks 2 times. The information, shown in Table 1, is generated from work orders initiated whenever the CDS Unit is inspected and needs to be cleaned. Cleaning consists of either washing debris off the bar racks or hauling the solids and floatables from the site. Both operations result in removing debris that would otherwise overflow into Beargrass Creek. When cleaning the bar racks, the debris is reintroduced into the sewer system, and as a result, is difficult to accurately estimate the amount removed during the maintenance process. The report often indicates the quantity removed as “unknown”.

Table 1. CSO108 CDS Unit Debris Removal

ACTIVITY	QUANTITY	COMMENTS	COMPLETED DATE
DEBRIS	UNKNOWN	CLEANED MEDIUM DEBRIS OFF RACK BARS NORTHINGTON BRITTLE	7/9/2019
DEBRIS	UNKNOWN	CLEANED MEDIUM DEBRIS FROM RACK BARS NORTHINGTON BRITTLE	9/10/2019

2.2. Maintenance Activities

In addition to the weekly inspections, MSD has initiated a preventative maintenance program to insure that the CDS unit and respective pumps are performing optimally. During these quarterly preventative maintenance activities, MSD staff also cleans the CDS unit and rack bars, washing the debris into the interceptor. The CDS Unit’s pumps are removed from the facility twice yearly to more closely inspect and to perform any needed maintenance.

2.3. Captured Flow

The CDS unit was placed along the Trevillian Way Twin Trunk Sewer to capture solids and floatables from a 485-acre drainage area. The unit uses a vortex action created by the hydraulic energy of incoming flow to separate solids and floatable from the flow. The treated flow is then discharged through the outlet pipe to Beargrass Creek and the debris that is captured is pumped to the Morris Forman Water Quality Treatment Center (WQTC).

In an effort to estimate the volume of debris captured by the CDS unit and kept within the sewer system, a study of the efficiency of the unit was performed in the early 2002. The results of the study indicated that the concentration of solids kept within the sewer system was approximately 1ml/l. Using pump run times and knowing the efficiency of the pumps, MSD was able to determine a volume of solids captured by the CDS technology. MSD estimates that the CDS unit captured 54.4 tons of solids during the reporting period. Appendix B lists the pump run times and Appendix C shows the calculations MSD used to determine the amount of debris captured by the CDS Unit and sent to the Morris Forman WQTC for treatment.

APPENDIX A — PHOTOS OF AREA ADJACENT TO CSO108 AND THE CDS UNIT (DATED DECEMBER 18, 2019)

Figure 1. Entrance to CDS Unit

Figure 2. Entrance to CDS Unit

Figure 3. Area Adjacent to CDS Unit

Figure 4. Area Adjacent to CDS Unit

Figure 5. Area Adjacent to Creek

Figure 6. Area Adjacent to Creek

APPENDIX B CDS UNIT PUMP RUN TIMES

MOU SEMI-ANNUAL REPORT #23
JULY 1, 2019 - DECEMBER 31, 2019

Date	Pump 1 Run Hours	Pump 2 Run Hours	Pump 3 Run Hours
July 1, 2019	0.00	0.00	0.08
July 2, 2019	0.00	0.00	0.03
July 3, 2019	0.00	0.00	0.05
July 4, 2019	0.00	0.00	0.03
July 5, 2019	0.00	0.00	0.05
July 6, 2019	0.00	0.00	0.03
July 7, 2019	0.00	0.00	0.00
July 8, 2019	0.00	0.00	0.05
July 9, 2019	0.00	0.00	0.00
July 10, 2019	0.00	0.00	0.05
July 11, 2019	0.00	0.00	0.00
July 12, 2019	0.00	0.00	0.00
July 13, 2019	0.00	0.00	0.03
July 14, 2019	0.00	0.00	0.00
July 15, 2019	0.00	0.00	0.05
July 16, 2019	0.00	0.00	0.00
July 17, 2019	0.00	0.00	0.03
July 18, 2019	0.00	0.00	0.00
July 19, 2019	0.00	0.00	0.00
July 20, 2019	0.00	0.00	0.45
July 21, 2019	0.00	0.00	0.00
July 22, 2019	0.00	0.00	0.00
July 23, 2019	0.00	0.00	0.00
July 24, 2019	0.00	0.00	0.00
July 25, 2019	0.00	0.00	0.00
July 26, 2019	0.00	0.00	0.00
July 27, 2019	0.00	0.00	0.00
July 28, 2019	0.00	0.00	0.00
July 29, 2019	0.00	0.00	0.00
July 30, 2019	0.00	0.00	0.03
July 31, 2019	0.18	0.00	0.38
August 1, 2019	0.00	0.00	0.05
August 2, 2019	0.00	0.00	0.00
August 3, 2019	0.00	0.00	0.03
August 4, 2019	0.00	0.00	0.00
August 5, 2019	0.00	0.00	0.00
August 6, 2019	0.00	0.00	0.05
August 7, 2019	0.00	0.00	0.00
August 8, 2019	0.00	0.00	0.00
August 9, 2019	0.00	0.00	0.03

August 10, 2019	0.00	0.00	0.00
August 11, 2019	0.00	0.00	0.00
August 12, 2019	0.00	0.00	0.05
August 13, 2019	0.00	0.00	0.00
August 14, 2019	0.00	0.00	0.00
August 15, 2019	0.00	0.00	0.03
August 16, 2019	0.00	0.00	0.00
August 17, 2019	0.00	0.00	0.18
August 18, 2019	0.00	0.00	0.00
August 19, 2019	0.00	0.00	0.00
August 20, 2019	0.00	0.00	0.00
August 21, 2019	0.00	0.00	0.00
August 22, 2019	0.00	0.00	0.00
August 23, 2019	0.00	0.00	0.00
August 24, 2019	0.00	0.00	0.32
August 25, 2019	0.00	0.00	0.00
August 26, 2019	0.00	0.00	0.00
August 27, 2019	0.00	0.00	0.05
August 28, 2019	0.00	0.00	0.08
August 29, 2019	0.00	0.00	0.00
August 30, 2019	0.00	0.00	0.03
August 31, 2019	0.00	0.00	0.00
September 1, 2019	0.00	0.00	0.00
September 2, 2019	0.00	0.00	0.05
September 3, 2019	0.00	0.00	0.00
September 4, 2019	0.00	0.00	0.00
September 5, 2019	0.00	0.00	0.03
September 6, 2019	0.00	0.00	0.00
September 7, 2019	0.00	0.00	0.00
September 8, 2019	0.00	0.00	0.05
September 9, 2019	0.00	0.00	0.00
September 10, 2019	0.00	0.00	0.05
September 11, 2019	0.00	0.00	0.00
September 12, 2019	0.00	0.00	0.00
September 13, 2019	0.00	0.00	0.03
September 14, 2019	0.00	0.00	0.00
September 15, 2019	0.00	0.00	0.00
September 16, 2019	0.00	0.00	0.05
September 17, 2019	0.00	0.00	0.00
September 18, 2019	0.00	0.00	0.03
September 19, 2019	0.00	0.00	0.00

September 20, 2019	0.00	0.00	0.05
September 21, 2019	0.00	0.00	0.00
September 22, 2019	0.00	0.00	0.00
September 23, 2019	0.00	0.00	0.03
September 24, 2019	0.00	0.00	0.00
September 25, 2019	0.00	0.00	0.05
September 26, 2019	0.00	0.00	0.00
September 27, 2019	0.00	0.00	0.00
September 28, 2019	0.00	0.00	0.03
September 29, 2019	0.00	0.00	0.00
September 30, 2019	0.00	0.00	0.05
October 1, 2019	0.00	0.00	0.00
October 2, 2019	0.00	0.00	0.03
October 3, 2019	0.00	0.00	0.00
October 4, 2019	0.00	0.00	0.05
October 5, 2019	0.00	0.00	0.00
October 6, 2019	0.00	0.00	0.05
October 7, 2019	0.00	0.00	0.00
October 8, 2019	0.00	0.00	0.08
October 9, 2019	0.00	0.00	0.03
October 10, 2019	0.00	0.00	0.05
October 11, 2019	0.00	0.00	0.03
October 12, 2019	0.00	0.00	0.00
October 13, 2019	0.00	0.00	0.05
October 14, 2019	0.00	0.00	0.00
October 15, 2019	0.00	0.00	0.03
October 16, 2019	0.00	0.00	0.00
October 17, 2019	0.00	0.00	0.05
October 18, 2019	0.00	0.00	0.08
October 19, 2019	0.00	0.00	0.05
October 20, 2019	0.00	0.00	0.00
October 21, 2019	0.00	0.00	0.03
October 22, 2019	0.00	0.00	0.05
October 23, 2019	0.00	0.00	0.00
October 24, 2019	0.00	0.00	0.03
October 25, 2019	0.00	0.00	0.00
October 26, 2019	0.00	0.00	0.05
October 27, 2019	0.00	0.00	0.00
October 28, 2019	0.00	0.00	0.13
October 29, 2019	0.00	0.00	0.08
October 30, 2019	0.00	0.00	0.00

October 31, 2019	0.00	0.00	0.03
November 1, 2019	0.00	0.00	0.13
November 2, 2019	0.00	0.00	0.22
November 3, 2019	0.00	0.00	0.05
November 4, 2019	0.00	0.00	0.00
November 5, 2019	0.00	0.00	0.03
November 6, 2019	0.00	0.00	0.05
November 7, 2019	0.00	0.00	0.00
November 8, 2019	0.00	0.00	0.03
November 9, 2019	0.00	0.00	0.08
November 10, 2019	0.00	0.00	0.00
November 11, 2019	0.00	0.00	0.05
November 12, 2019	0.00	0.00	0.05
November 13, 2019	0.00	0.00	0.03
November 14, 2019	0.00	0.00	0.00
November 15, 2019	0.00	0.00	0.05
November 16, 2019	0.00	0.00	0.03
November 17, 2019	0.00	0.00	0.00
November 18, 2019	0.00	0.00	0.05
November 19, 2019	0.00	0.00	0.00
November 20, 2019	0.00	0.00	0.03
November 21, 2019	0.00	0.00	0.00
November 22, 2019	0.00	0.00	0.05
November 23, 2019	0.00	0.00	0.00
November 24, 2019	0.00	0.00	0.05
November 25, 2019	0.00	0.00	0.03
November 26, 2019	0.00	0.00	0.05
November 27, 2019	0.00	0.00	0.03
November 28, 2019	0.00	0.00	0.05
November 29, 2019	0.00	0.00	0.22
November 30, 2019	0.00	0.00	0.08
December 1, 2019	0.00	0.00	0.05
December 2, 2019	0.00	0.13	1.70
December 3, 2019	0.00	0.00	22.85
December 4, 2019	0.00	0.00	12.37
December 5, 2019	0.00	0.00	0.13
December 6, 2019	0.00	0.00	0.13
December 7, 2019	0.00	0.00	0.08
December 8, 2019	0.00	0.00	0.05
December 9, 2019	0.00	0.00	0.03
December 10, 2019	0.00	0.00	0.05

December 11, 2019	0.00	0.00	0.03
December 12, 2019	0.00	0.00	0.05
December 13, 2019	0.00	0.00	0.05
December 14, 2019	0.00	0.00	0.00
December 15, 2019	0.00	0.00	0.03
December 16, 2019	0.00	0.00	0.08
December 17, 2019	0.00	0.00	0.08
December 18, 2019	0.00	0.00	0.30
December 19, 2019	0.00	0.00	0.32
December 20, 2019	0.00	0.00	0.22
December 21, 2019	0.00	0.00	0.12
December 22, 2019	0.00	0.00	0.13
December 23, 2019	0.00	0.00	0.13
December 24, 2019	0.00	0.00	0.03
December 25, 2019	0.00	0.00	0.05
December 26, 2019	0.00	0.00	0.05
December 27, 2019	0.00	0.00	0.03
December 28, 2019	0.00	0.00	0.00
December 29, 2019	0.00	0.00	0.05
December 30, 2019	0.00	0.00	0.03
December 31, 2019	0.00	0.00	0.18

APPENDIX C CSO108 UNDERFLOW PUMP FLOW METER DATA

MOU SEMI-ANNUAL REPORT #23
JULY 1, 2019 - DECEMBER 31, 2019

Date	Daily Volume (MG)	Daily Volume (CF)	Daily Volume (gal)	Daily Volume Debris (gal)
July 1, 2019	0.04	5,968.86	44,650.16	44.65
July 2, 2019	0.04	5,548.18	41,503.24	41.50
July 3, 2019	0.04	5,507.25	41,197.13	41.20
July 4, 2019	0.04	5,541.99	41,456.94	41.46
July 5, 2019	0.04	5,345.67	39,988.43	39.99
July 6, 2019	0.04	5,537.21	41,421.20	41.42
July 7, 2019	0.04	4,936.62	36,928.49	36.93
July 8, 2019	0.04	5,507.64	41,200.05	41.20
July 9, 2019	0.04	4,940.08	36,954.37	36.95
July 10, 2019	0.04	5,366.96	40,147.66	40.15
July 11, 2019	0.04	4,936.62	36,928.49	36.93
July 12, 2019	0.04	4,936.62	36,928.49	36.93
July 13, 2019	0.04	5,142.48	38,468.44	38.47
July 14, 2019	0.04	4,940.08	36,954.37	36.95
July 15, 2019	0.04	5,544.89	41,478.70	41.48
July 16, 2019	0.04	4,936.62	36,928.49	36.93
July 17, 2019	0.04	5,538.56	41,431.32	41.43
July 18, 2019	0.04	4,936.62	36,928.49	36.93
July 19, 2019	0.04	4,936.62	36,928.49	36.93
July 20, 2019	0.08	10,591.79	79,232.08	79.23
July 21, 2019	0.04	4,936.62	36,928.49	36.93
July 22, 2019	0.04	4,936.62	36,928.49	36.93
July 23, 2019	0.04	4,940.08	36,954.37	36.95
July 24, 2019	0.04	4,936.62	36,928.49	36.93
July 25, 2019	0.04	4,936.68	36,928.94	36.93
July 26, 2019	0.04	4,936.83	36,930.02	36.93
July 27, 2019	0.04	4,937.15	36,932.48	36.93
July 28, 2019	0.04	4,936.71	36,929.18	36.93
July 29, 2019	0.04	4,940.08	36,954.39	36.95
July 30, 2019	0.04	5,238.63	39,187.67	39.19
July 31, 2019	0.05	6,431.25	48,109.06	48.11
August 1, 2019	0.04	5,239.45	39,193.84	39.19
August 2, 2019	0.04	4,936.62	36,928.49	36.93
August 3, 2019	0.04	5,421.48	40,555.46	40.56
August 4, 2019	0.04	4,936.62	36,928.49	36.93
August 5, 2019	0.04	4,936.62	36,928.49	36.93
August 6, 2019	0.04	5,240.72	39,203.32	39.20
August 7, 2019	0.04	4,936.62	36,928.50	36.93
August 8, 2019	0.04	4,936.62	36,928.49	36.93

August 9, 2019	0.04	5,525.03	41,330.13	41.33
August 10, 2019	0.04	4,936.62	36,928.49	36.93
August 11, 2019	0.04	4,936.62	36,928.49	36.93
August 12, 2019	0.04	5,524.27	41,324.40	41.32
August 13, 2019	0.04	4,940.17	36,955.06	36.96
August 14, 2019	0.04	4,936.62	36,928.49	36.93
August 15, 2019	0.04	5,496.94	41,119.99	41.12
August 16, 2019	0.04	4,936.62	36,928.49	36.93
August 17, 2019	0.05	7,153.55	53,512.31	53.51
August 18, 2019	0.04	4,936.63	36,928.55	36.93
August 19, 2019	0.04	4,936.62	36,928.49	36.93
August 20, 2019	0.04	4,936.62	36,928.49	36.93
August 21, 2019	0.04	4,940.08	36,954.37	36.95
August 22, 2019	0.04	4,936.62	36,928.49	36.93
August 23, 2019	0.04	4,936.62	36,928.50	36.93
August 24, 2019	0.05	6,901.90	51,629.79	51.63
August 25, 2019	0.04	4,936.62	36,928.49	36.93
August 26, 2019	0.04	4,941.89	36,967.89	36.97
August 27, 2019	0.04	5,197.01	38,876.37	38.88
August 28, 2019	0.04	5,839.68	43,683.82	43.68
August 29, 2019	0.04	4,936.62	36,928.49	36.93
August 30, 2019	0.04	5,555.87	41,560.78	41.56
August 31, 2019	0.04	4,936.78	36,929.66	36.93
September 1, 2019	0.04	4,936.62	36,928.49	36.93
September 2, 2019	0.04	5,243.68	39,225.44	39.23
September 3, 2019	0.04	4,936.62	36,928.49	36.93
September 4, 2019	0.04	4,940.08	36,954.37	36.95
September 5, 2019	0.04	5,474.25	40,950.27	40.95
September 6, 2019	0.04	4,936.62	36,928.49	36.93
September 7, 2019	0.04	4,940.13	36,954.71	36.95
September 8, 2019	0.04	5,521.43	41,303.14	41.30
September 9, 2019	0.04	4,936.77	36,929.60	36.93
September 10, 2019	0.04	5,519.62	41,289.63	41.29
September 11, 2019	0.04	4,940.39	36,956.71	36.96
September 12, 2019	0.04	4,936.63	36,928.58	36.93
September 13, 2019	0.04	5,450.06	40,769.26	40.77
September 14, 2019	0.04	4,936.62	36,928.49	36.93
September 15, 2019	0.04	4,936.62	36,928.49	36.93
September 16, 2019	0.04	5,516.95	41,269.63	41.27
September 17, 2019	0.04	4,943.52	36,980.14	36.98
September 18, 2019	0.04	5,500.00	41,142.84	41.14

September 19, 2019	0.04	4,936.62	36,928.49	36.93
September 20, 2019	0.04	5,540.48	41,445.66	41.45
September 21, 2019	0.04	4,936.67	36,928.86	36.93
September 22, 2019	0.04	4,936.62	36,928.49	36.93
September 23, 2019	0.04	5,419.81	40,543.01	40.54
September 24, 2019	0.04	4,941.15	36,962.34	36.96
September 25, 2019	0.04	5,308.85	39,712.94	39.71
September 26, 2019	0.04	4,942.90	36,975.50	36.98
September 27, 2019	0.04	4,944.71	36,989.01	36.99
September 28, 2019	0.04	5,494.96	41,105.14	41.11
September 29, 2019	0.04	4,944.72	36,989.11	36.99
September 30, 2019	0.04	5,497.62	41,125.04	41.13
October 1, 2019	0.04	4,940.08	36,954.37	36.95
October 2, 2019	0.04	5,454.19	40,800.18	40.80
October 3, 2019	0.04	4,936.62	36,928.49	36.93
October 4, 2019	0.04	5,473.61	40,945.43	40.95
October 5, 2019	0.04	4,936.73	36,929.27	36.93
October 6, 2019	0.04	5,506.53	41,191.72	41.19
October 7, 2019	0.04	4,948.83	37,019.86	37.02
October 8, 2019	0.05	6,122.17	45,797.05	45.80
October 9, 2019	0.04	5,537.86	41,426.08	41.43
October 10, 2019	0.04	5,546.75	41,492.57	41.49
October 11, 2019	0.04	5,561.94	41,606.20	41.61
October 12, 2019	0.04	4,948.97	37,020.86	37.02
October 13, 2019	0.04	5,518.20	41,278.97	41.28
October 14, 2019	0.04	4,985.89	37,297.08	37.30
October 15, 2019	0.04	5,543.78	41,470.35	41.47
October 16, 2019	0.04	4,966.95	37,155.40	37.16
October 17, 2019	0.04	5,437.82	40,677.69	40.68
October 18, 2019	0.04	5,919.30	44,279.47	44.28
October 19, 2019	0.04	5,310.69	39,726.76	39.73
October 20, 2019	0.04	4,982.81	37,274.00	37.27
October 21, 2019	0.04	5,511.03	41,225.38	41.23
October 22, 2019	0.04	5,545.74	41,485.05	41.49
October 23, 2019	0.04	4,949.79	37,027.00	37.03
October 24, 2019	0.04	5,505.39	41,183.18	41.18
October 25, 2019	0.04	4,978.70	37,243.27	37.24
October 26, 2019	0.04	5,583.14	41,764.80	41.76
October 27, 2019	0.04	4,965.81	37,146.81	37.15
October 28, 2019	0.05	6,511.45	48,709.05	48.71
October 29, 2019	0.05	6,164.95	46,117.00	46.12

October 30, 2019	0.04	4,973.87	37,207.12	37.21
October 31, 2019	0.04	5,567.61	41,648.60	41.65
November 1, 2019	0.05	6,592.65	49,316.48	49.32
November 2, 2019	0.06	7,727.06	57,802.46	57.80
November 3, 2019	0.04	5,615.89	42,009.81	42.01
November 4, 2019	0.04	5,041.92	37,716.17	37.72
November 5, 2019	0.04	5,571.34	41,676.51	41.68
November 6, 2019	0.04	5,545.37	41,482.27	41.48
November 7, 2019	0.04	5,006.56	37,451.68	37.45
November 8, 2019	0.04	5,603.53	41,917.29	41.92
November 9, 2019	0.05	6,151.29	46,014.88	46.01
November 10, 2019	0.04	5,124.81	38,336.21	38.34
November 11, 2019	0.04	5,642.26	42,207.02	42.21
November 12, 2019	0.04	5,621.06	42,048.48	42.05
November 13, 2019	0.04	5,593.65	41,843.45	41.84
November 14, 2019	0.04	5,200.44	38,902.01	38.90
November 15, 2019	0.04	5,782.82	43,258.50	43.26
November 16, 2019	0.04	5,677.51	42,470.70	42.47
November 17, 2019	0.04	5,125.54	38,341.70	38.34
November 18, 2019	0.04	5,645.22	42,229.22	42.23
November 19, 2019	0.04	5,078.78	37,991.93	37.99
November 20, 2019	0.04	5,599.39	41,886.33	41.89
November 21, 2019	0.04	5,038.45	37,690.21	37.69
November 22, 2019	0.04	5,596.49	41,864.67	41.86
November 23, 2019	0.04	5,002.96	37,424.78	37.42
November 24, 2019	0.04	5,520.27	41,294.52	41.29
November 25, 2019	0.04	5,593.69	41,843.71	41.84
November 26, 2019	0.04	5,543.00	41,464.52	41.46
November 27, 2019	0.04	5,508.94	41,209.73	41.21
November 28, 2019	0.04	5,579.09	41,734.46	41.73
November 29, 2019	0.06	7,698.42	57,588.21	57.59
November 30, 2019	0.04	6,007.84	44,941.75	44.94
December 1, 2019	0.04	5,586.34	41,788.76	41.79
December 2, 2019	0.21	27,652.30	206,853.57	206.85
December 3, 2019	0.05	6,579.48	49,217.90	49.22
December 4, 2019	0.07	8,940.85	66,882.17	66.88
December 5, 2019	0.05	6,395.84	47,844.21	47.84
December 6, 2019	0.05	6,676.47	49,943.48	49.94
December 7, 2019	0.05	6,220.76	46,534.51	46.53
December 8, 2019	0.04	5,564.22	41,623.24	41.62
December 9, 2019	0.04	5,595.86	41,859.95	41.86

December 10, 2019	0.04	5,610.47	41,969.22	41.97
December 11, 2019	0.04	5,570.98	41,673.85	41.67
December 12, 2019	0.04	5,653.75	42,292.96	42.29
December 13, 2019	0.04	5,723.32	42,813.45	42.81
December 14, 2019	0.04	5,106.61	38,200.08	38.20
December 15, 2019	0.04	5,587.47	41,797.17	41.80
December 16, 2019	0.05	6,066.43	45,380.04	45.38
December 17, 2019	0.05	6,151.60	46,017.18	46.02
December 18, 2019	0.06	8,504.60	63,618.85	63.62
December 19, 2019	0.07	8,952.02	66,965.77	66.97
December 20, 2019	0.06	8,000.01	59,844.24	59.84
December 21, 2019	0.05	6,868.95	51,383.30	51.38
December 22, 2019	0.05	6,678.15	49,956.06	49.96
December 23, 2019	0.05	6,668.91	49,886.93	49.89
December 24, 2019	0.04	5,627.28	42,094.98	42.09
December 25, 2019	0.04	5,648.79	42,255.92	42.26
December 26, 2019	0.04	5,466.49	40,892.15	40.89
December 27, 2019	0.04	5,628.93	42,107.31	42.11
December 28, 2019	0.04	4,999.39	37,398.01	37.40
December 29, 2019	0.04	5,518.76	41,283.23	41.28
December 30, 2019	0.04	5,498.13	41,128.90	41.13
December 31, 2019	0.05	7,239.37	54,154.27	54.15

PROJECT WIN

Waterway Improvements Now