

**MSDGC**

**AUGUST 2016 ENTERPRISE  
MANAGEMENT ACTIVITY  
REPORT**

**Metropolitan Sewer District  
of Greater Cincinnati**

09/30/2016 Issued Date

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## EXECUTIVE SUMMARY

MSD continues to be diligent in implementing and reporting out on its capital program. The organization continues to complete important projects; comply with Consent Decree requirements; and implement cost saving measures. This report provides a brief summary of the MSD's efforts through August 31, 2016.

### Program Health

MSD's Wet Weather and Asset Management Programs continue to be in relatively good health. Through August 31<sup>st</sup> capital expenditures for the WWIP, Asset Management, and Allowance projects were \$51,723,674 across 301 active projects. To-date MSD has complied with 71 of the 100 Consent Decree milestones. Concerns regarding Consent Decree compliance are presented in the Risk Management section of this report. MSD utilizes the program metrics outlined by the BoCC via MSD Rule 2409 and these are presented below in the following table. The City strives to provide comprehensive information and responses to advise the County of concern related to meeting milestones and deadlines; MSD strives to reduce or mitigate risks and provides such information to inform and advise ratepayers and policy makers.

**Table 1 – Summary of Capital Program Metrics Provided by BOCC**

Program Activity	County Metric	Current Status
Permit Applications	Submit application prior to applicable deadline	PTIs applications provided to the County are listed in Table 16. One application was provided during the current reporting period.
Permit Violations	No NPDES permit limit exceedances or other violations	CSO bypasses listed in Table 41 and WWTP and pump station bypasses listed in Table 42. WWTP NPDES permit violations during current reporting period.
Safety Performance	No lost time accidents; no significant OSHA noncompliance; or MSD safety audit findings	Accidents and injuries for current reporting period are listed in Table 43. Year-to-date no lost time injuries have been reported. No significant OSHA noncompliance issues or audit findings were identified.
Cash Flow Forecast vs. Actual Expenditures	90% of original baseline forecast for each month	Cash Flow forecast vs. actual expenditures shown in Figure 6. Current month trending 73% of baseline.
Budget Variances	Zero budget variance	Variances are reported at the project activity level and are expected to occur among line items. During current reporting period 46 projects had activity budget variances (refer to Appendix B).

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Program Activity	County Metric	Current Status
Schedule Variances	No Variance > 30 days	Variances are reported at the project activity level and are expected to occur among line items. During current reporting period 77 projects had activity schedule variances > 30 days (refer to Appendix B) – half of which for associated with prioritization for the draft 2017 CIP currently under developed by MSD
Change Orders and Notices of Advisement	Continuous reduction in the amount of change to time and cost	MSD works diligently to minimize the amount of change to time and cost. Change orders and NOAs executed during the current reporting period are published in Tables 32 and 33.
De-Legislation Activities	As outlined in Section 2405-3	MSD received comments from the County regarding de-legislation in late June. Staff is reviewing these comments and will address with next month's report.

### Regulatory Coordination

A variety of coordination efforts were on-going during July with multiple regulatory agencies. A summary is provided below.

- Adaptive Management Discussions - MSD and the County team continued to have conversations with the Consent Decree Regulators regarding the Phase 1 Adaptive Management projects and Post Construction Monitoring Plan. A conference call was held among the technical team on August 4<sup>th</sup>.
- Treatment Plants – On August 26<sup>th</sup> MSD submitted the DMRQA-36 report for all major treatment plants to Ohio EPA .

Mill Creek Air Permit – On August 31<sup>st</sup> MSD had discussion with SWOAQA coordinating/scheduling a RATA test to validate emissions data for the CO analyzer of FBI 2 which was replaced due to failure .

### Stakeholder Coordination

MSD has many opportunities to coordinate with its stakeholders. A summary of efforts completed during this reporting period is presented herein.

### ***Community Meetings & Outreach Events***

The following and community outreach events were held with various stakeholders during this reporting period:

#### **Meetings Forecasted for August 2016**

- CAGIS Policy Board Meeting – August 4<sup>th</sup>
- Watershed Action Team – August 5<sup>th</sup>
- Queensgate Business Alliance Meeting – August 5<sup>th</sup>
- Paddlefest – August 6<sup>th</sup>
- Spring Grove Village Community Council Meeting – August 9<sup>th</sup>
- South Fairmount Community Council Meeting – August 9<sup>th</sup>
- Green Infrastructure Meeting with Various Agencies – August 18<sup>th</sup> Green Umbrella Meetings –  
Watershed Policy Committee Meeting – August 30<sup>th</sup>

#### ***Press Releases Submitted in August 2016***

- Want to Know When Conditions Are Likely for Sewer Overflows and Basement Backup? Sign Up for Email Alerts Now - August 3<sup>rd</sup>
- Traffic Alert – White Street Closed in South Fairmount – August 3<sup>rd</sup>
- MSD Notice of Construction – Werk & Westbourne Enhanced High Treatment Facility (EHRT) – August 9<sup>th</sup>
- MSD Response to Sewer Backups – August 29<sup>th</sup>
- Traffic Alert – Guerley Road to Close September 6 in West Price Hill – August 30<sup>th</sup>

#### ***Public Records Requests***

MSD received the following records requests during August 2016:

- Sarah Schmidt – Intersection of Westwood Avenue and Harrison Avenue – August 2<sup>nd</sup>
- Marilyn Wall – 2016 Alison Landscaping Contract – August 2<sup>nd</sup>
- Jim Ritter – Rybolt Road Ruwe's Oak inlets – August 5<sup>th</sup>
- Livia Stinson – Employee Records – August 5<sup>th</sup>
- Biju George – Pump Station Analysis – August 11<sup>th</sup>
- Bill Katchman – Traffic Pattern – August 17<sup>th</sup>
- Sarah Harvey – Wastewater Discharge Permit – August 22<sup>nd</sup>
- Dan Schaefer – Inspection Reports – August 22<sup>nd</sup>
- Adrijana Kowatsch – Claim Vouchers – August 24<sup>th</sup>
- Marybeth Taylor – SBU Claims Capacity – August 24<sup>th</sup>
- Livia Stinson – Employee Records – August 26<sup>th</sup>
- Brian Shrive – 5513 Vine Street – August 26<sup>th</sup>

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**Sewer Backup Program Coordination**

During August, MSD spent \$378,555.31 for the Sewer Backup Response Program (SBU). A total of 1,936 SBU service requests were received by MSD during August. After field investigations were performed, it was determined that seventy-three of the requests were eligible for cleanup by MSD. Forty-four property residents accepted the MSD cleanup offer\*. MSD’s repair crews installed 99 cleanouts at the right-of-way line during August. Zero prevention devices were installed during August. Settlement offers were made for four claims and the average processing time for settlements offered was 46 days. The information above is current as of September 20, 2016.

Please note that the number of eligible SBU cleanups, number accepted by MSD property residents and cleanup contractor expenses are for the period of 08/01/16-08/27/16. These numbers do not include the 100-year (1% chance) Storm that inundated the region on August 28<sup>th</sup> and MSD WWC division continues to respond to the calls from this event. Additional resources are being retained and modified procedures to be able to respond more efficiently to the significant numbers of requests for service. Additional labor charges will also be added in September’s report for this rain event – a new Kronos code was established on 09/07/16 for SBU-related work for this rain event. It is anticipated that MSD will log more than 2,000 sewer customer backup (SBU) reports. MSD provided a rough estimate based on what was between 1,200 and 1,500 residents and businesses, representing a cost range of \$6 million to \$9 million for cleaning and an additional \$6 million for supplemental claims (including eligible SBU related electrical and mechanical systems, furniture, cars inside residences). Additional funding, beyond what the Hamilton County BOCC has appropriated, may be necessary to cover the storm claims. MSD is maintaining records for its potential reimbursement through the Ohio Emergency Management Agency and is coordinating with the Hamilton County Emergency Management Agency.

**Table 2 – SBU Settlements Offered**

<b>SBU SETTLEMENTS OFFERED - FOR CLAIMS 08/01/16 TO 08/27/16</b>						
<b>NAME</b>	<b>ADDRESS OF CLAIM</b>	<b>CLAIM AMOUNT</b>	<b>LAW RECEIVED</b>	<b>DISPOSITION</b>	<b>DAYS TO PROCESS</b>	<b>COMMENTS</b>
CARRIE J BROWN	1825 HEIDELBERG DR, CINTI	\$1,165.00	06/27/2016	08/17/2016	51	
TIFFANY JOHNSON	2632 ST ALBANS AVE, CINTI	\$594.00	07/13/2016	08/02/2016	20	Tenant
MICHAEL MATTOX	2889 ROMANA PL, CINTI	\$5,470.00	06/06/2016	08/04/2016	59	
JONATHAN R SINCLAIR & SARA M SHEETS	4537 HECTOR AVE, CINTI	\$753.00	06/13/2016	08/05/2016	53	
	Number of Settlements Offered		4 Grand Tot	\$7,982.00		
	Average Processing Time in days			45.75		
	September 23, 2016					



## **County CIP Coordination**

During August MSD held review meetings for projects in planning, design, right-of-way, and construction which the County monitoring team was invited to attend. The following specialty meetings were scheduled during this reporting period.

- West Fork Riparian and Floodplain Restoration – August 2<sup>nd</sup>
- SSO 700 IWAP – August 3<sup>rd</sup>
- Westwood Northern Bundle and West Fork Riparian/Floodplain Restoration Stormwater Policy – August 12<sup>th</sup>
- Kings Run Model Discussion – August 30<sup>th</sup>
- Several meetings are scheduled for coordination of Phase 2 Scheduling for September and October

MSD coordinates several documents for review with the County and uploads responses to requests to a “County Review (CR) System”. An overview of unresolved issues for active projects is provided in the following table.

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Table 3 – Notifications Provided to County for Review/Approval

CR#	Project ID	Name	Category	Submitted	Response
110	10270022	Beverly Hill Drive Sewer Replacement	Construction Change Order 002	10/12/15 11/20/15 Approved w/conditions 1/13/16 Resubmitted 4/14/16 CRAI 4/19/16 Conditions Not Met	Pending
133	10240635	Mill Creek Plant Influent and Headworks Odor Control	Non-Rule Related	11/11/15 11/20/15 CRAI; 12/15/15 Resubmitted 12/17/15 Approved with Conditions 1/19/16 Resubmitted 3/7/16 CRAI; 4/29/16 Resubmitted 5/19/16 Approved with Condition	Approved with Conditions
142	10240480	Mill Creek WWTP Dewatering Polymer System	Legislation	11/17/15 12/7/15 CRAI; 12/11/15 Resubmitted 1/8/16 CRAI; 1/22/16 Resubmitted 3/7/16 CRAI; 4/14/16 Resubmitted 5/31/16 CRAI; 6/1/16 Resubmitted 7/5/16 Resubmitted; 7/29/15 CRAI	Pending
148	11040190	West Fork Riparian and Floodplain Restoration	Legislation	11/19/15 12/24/15 CRAI; 3/9/16 Resubmitted 3/14/16 CRAI; 4/12/16 Resubmitted 5/19/16 CRAI; 6/2/16 Resubmitted 7/6/16 CRAI	Pending
159	10270180	Little Miami WWTP Storm Water Realignment	Program Contingency Extra Work	11/23/15 12/21/15 CRAI; 4/5/16 Resubmitted 4/11/2016	Approved w/conditions
171	10240291	Mill Creek WWTP Solids Handling Improvements Phase 1	PTI	12/10/15 1/11/16 CRAI;	Pending
173	12270130	Little Miami WWTP Solids Plan	Non-Rule Related	12/15/15 12/23/15 CRAI; 1/4/16 Resubmitted 1/4/16 CRAI; 1/6/16 Resubmitted 1/15/16; 2/4/16 Resubmitted 2/17/16 & 2/24/16 CRAI 3/4/16 Resubmitted 4/19/16 CRAI; 4/26/16 Resubmitted 4/29/16 CRAI; 5/4/16 Resubmitted	Pending
176	10430025	Kildare Drive Sewer Lateral Assessment (HN 6726-	Construction Change Order 0001	12/18/15 12/29/15 CRAI; 3/11/16 Resubmitted 3/18/16	Approved w/conditions

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CR#	Project ID	Name	Category	Submitted	Response
		6750)			
187	11240051	Harrison Avenue Sewer Separation Phase B	Performance Report	1/12/16 2/29/16 CRAI; 2/29/16 Resubmitted 4/1/16 Approved w/conditions; 4/4/16 Resubmitted 5/19/16 Conditions not met	Approved w/conditions
190	10270180	Little Miami WWTP Storm Water Realignment	Program Contingency 0001	1/14/16 2/23/16 CRAI; 3/11/16 Resubmitted 4/1/16 CRAI	Pending
192	1018011610 2803161028 0516	Wastewater Collection Allowances	CIP and Operating Budget Preparation	1/20/16 2/26/16 CRAI; 3/3/16 Resubmitted Combined with CR-193 & CR-204 4/5/16, 5/5/16 CRAI; 5/6/16 Resubmitted	Pending
194	11140010	SSO 700 Integrated Watershed Action Plan	Non-Rule Related	1/20/16 2/23/16 Approved w/condition 2/29/16 complied w/conditions 3/7/16 complied w/conditions 3/17/16 complied w/conditions 3/28/16 & 4/15/16 CRAI	Approved w/Conditions
197	11243840	CSO 127 and 128 Stream Separations	Program Contingency 002	1/21/16 2/24/16 CRAI; 4/17/16 Resubmitted 4/11/16	Approved w/conditions
202	11140010	SSO 700 Integrated Watershed Action Plan	Non-Rule Related Water Quality Data Collection Program Summary - Technical Memorandum	1/25/16 2/29/16 CRAI; 3/14/16 Resubmitted 4/1/16 CRAI; 6/30/16 Resubmitted 8/25/16 CRAI;	Pending
206	11243141	CSO 217/483 Source Control Phase B	Work Order Amendment and Revised Model Report	1/29/16 2/12/16 CRAI; 3/7/16 Resubmitted 3/11/16 Resubmitted; 3/15/16 Resubmitted; 3/24/16 Resubmitted 4/11/16 CRAI; 5/5/16 Resubmitted 7/1/16 CRAI	Pending
207	11240000	Lick Run Valley Conveyance System	MOUs	1/27/16 2/12/16 CRAI; 4/1/16 Resubmitted 5/3/16 CRAI;	Pending
208	10131180	Muddy Creek	Work Order	2/1/16	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		Belt Filter Press	#4231180001 Amendment 2	2/17/16 CRAI; 2/19/16 Resubmitted 2/22/16 CRAI; 2/25/16 Resubmitted 2/26/16 CRAI; 3/4/16 Resubmitted 3/18/16 CRAI; 3/21/16 Resubmitted 4/11/16 CRAI	
211	12280035	District-Wide Solids Handling Master Plan	Other Reports and Notices to the Board and/or County Administration	2/3/16 3/18/16 CRAI; 3/24/16 Resubmitted 4/7/16 & 6/8/16 CRAI 7/15/16 Resubmitted	Pending
212	10270195	Little Miami WWTP Incineration Improvements	Legislation	2/4/16 2/18/16 CRAI; 4/19/16 Resubmitted	Pending
215	10280606	Building Sewer Renewal Program 2016	Non-Rule Related BCE	2/4/16 3/23/16 CRAI; 5/31/16 CRAI 6/1/16 Clarification Requested 6/3/16 CRAI; 7/19/16 Resubmitted 8/9/16 CRAI via email; 8/16/16 Resubmitted	Pending
223	11040010	Rapid Run Park Source Control	Program Contingency 0004	2/10/16 3/24/16 CRAI; 4/29/16 Resubmitted 6/3/16 CRAI	Pending Coordinate w/CR267
226	10130740	Werk & Westbourne EHRT Facility	Legislation	2/15/16 3/2/16 CRAI; 3/11/16 Resubmitted 3/22/16 CRAI; 3/24/16 Resubmitted 3/25/16 CRAI; 6/17/16 Resubmitted	Pending
227	10171740	CSO 551 Sewer Separation	Legislation	2/15/16 3/23/16 CRAI 4/29/16	Approved w/conditions
231	10240018	CSO 125 Stream Separation	Work Order #454001802	2/16/16 2/29/16 CRAI; 3/28/16 Resubmitted 4/7/16	Approved w/conditions
236	11140010	SSO 700 IWAP Phase 2	Non-Rule Related Phase 2 Scope	3/1/16 4/18/16 CRAI; 5/11/16 Resubmitted 5/13/16 Resubmitted 6/3/16 Approved w/conditions 7/19/16 CRAI; 7/27/16 Resubmitted 8/2/16 Email; 8/3/16 Response	Approved w/conditions
237	10280186	WWT System Asset Renewal 2016 - Mill Creek WWTP Dewatering	Legislation	3/2/16 3/25/16 CRAI; 3/25/16 Resubmitted 4/11/16 CRAI 5/2/16	Approved w/conditions

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CR#	Project ID	Name	Category	Submitted	Response
		Centrifuge Rotating Assembly			
241	10240450	Vinton Street Sewer Replacement	Other Reports and Notices to the Board and/or County Administration BCE	3/11/16 (originally submitted 12/15/15) 3/18/16 CRAI	Pending
242	10240650	Hackberry Street Sewer Replacement	Other Reports and Notices to the Board and/or County Administration BCE	3/11/16 (originally submitted 9/5/15) 3/18/16 CRAI; 6/23/16 Resubmitted	Pending
248	11240000	Lick Run Valley Conveyance System	Legislation	3/21/16 4/5/16 Approved w/conditions 7/29/16 & 8/1/16 Resubmitted 8/1/16 Resubmitted 8/3/16 & 8/9/16 CRAI; 8/9/16 Resubmitted	Approved w/conditions
249	10240575	Mill Creek WWTP Enhanced Incinerator Emission Controls	Non-Rule Related	3/21/16 CRAI; 3/22/16 Resubmitted 3/25/16 Resubmitted 3/28/16 CRAI; 3/28/16 Resubmitted 3/29/16 CRAI; 3/30/16 Resubmitted 3/30/16 CRAI; 3/30/16 Resubmitted 4/7/16	Approved w/conditions
250	10240645	WWC Maintenance Shop Improvements	For Your Information	3/24/16 4/12/16 CRAI	Pending
251	11140010	SSO 700 IWAP	Non-Rule Related March Meeting Summary/Technical Memorandum	3/25/16 4/22/16 CRAI	Pending
253	10280106	WWT System Asset Renewal 2016 - Mill Creek WWTP NPW Pumps Purchase	Legislation	3/31/16 4/11/16 CRAI; 5/2/16 Resubmitted 7/5/16	Approved
254	10230041	Westport	Other Reports	4/1/16	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		Village PS Elimination	and Notices to the Board and/or County Administration FY2016-2020 CIP Condition	4/12/16 CRAI; 8/16/16 Resubmitted 8/31/16 CRAI;	
255	N/A	2015 DRAFT Annual Capital Reconciliation Report	Other Reports and Notices to the Board and/or County Administration	4/1/16 5/4/16 Comment; 5/10/16 Response 5/17/16 Resubmitted 5/27/16 CRAI	Pending
257	10280236	Hydraulic Modeling 2016	Other Reports and Notices to the Board and/or County Administration FY2016-2020 CIP Condition	4/8/16 4/29/16 CRAI; 8/3/16 Resubmitted	Pending
259	10240345	Myrtle Avenue Sewer Replacement	Program Contingency 0003	4/11/16 4/20/16 CRAI	Pending
260	N/A	WPCLF Loans	Non-Rule Related Nine Loans, Final Exhibits	4/11/16 4/25/16 4/29/16 Resubmitted	Approved w/conditions
261	11140010	SSO 700 Integrated Watershed Action Plan	Non-Rule Related Draft Task 3.1 - SSO 700 IWAP Evaluation Tools Summary Technical Memorandum	4/14/16 5/3/16 CRAI; 6/13/16 Resubmitted 6/29/16 CRAI	Pending
262	11240003	Program Management Services Lower Mill Creek Partial Remedy (LMCPR)	Legislation	4/15/16	Pending
265	Operating	2015 MSD Accrued Payables	For Your Information	4/20/16 5/5/16 CRAI; 5/6/16 Resubmitted 5/10/16 CRAI; 5/18/16 Resubmitted	Pending

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CR#	Project ID	Name	Category	Submitted	Response
				5/25/16 CRAI; 6/2/16 Resubmitted 6/3/16 CRAI;6/6/16 Resubmitted	
267	11040010	Rapid Run Park Source Control -	Legislation	4/20/16 6/3/16 CRAI	Pending
273	11240000	Lick Run VCS	Legislation - Phase A Beekman Grant	4/20/16 4/25/16 Approved w/conditions 4/26/16 CRAI; 5/2/16 Resubmitted 5/4/16 CRAI;	Approved w/Conditions Pending
274	10240291	Mill Creek WWTP Solids Handling Phase 1	Legislation	4/21/16 7/29/16 CRAI; 8/1/16 Resubmitted	Pending
275	10171900	Eastern & Delta Phase 3 - Auxiliary Outfall Volume	Non-Rule Related	CRAI 4/21/16; 4/29/16 Resubmitted 5/3/16 CRAI; 5/12/16 Resubmitted 6/1/16 CRAI; 6/2/16 Resubmitted 8/16/16	No Action Required
278	N/A	GCWW Billing Model For MSD	Non-Rule Related	4/29/16 5/25/16 CRAI;	Pending
285	Operating	2015 OTEA & Vehicle Reconciliation	For Information Only	5/3/16 6/3/16	Approved w/conditions
286	WWC Operating	Sewer CCTV Video Inspections / Pipeline Cleaning & Pigging Services/ Underground Asset Electronic Locating & Surveying in Anticipation of and in Coordination with Street Paving	Work Order #210000695	5/9/16 5/18/16 CRAI;5/18/16 Resubmitted 5/18/16 CRAI; 5/18/19 Resubmitted 5/27/16	Approved w/conditions
287	11140010	SSO 700 Integrated Watershed Action Plan	Non-Rule Related April 2016 Progress	5/10/16 6/1/16 CRAI	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		(IWAP) Study Project	Meeting Summary		
288	11140010	SSO 700 Integrated Watershed Action Plan (IWAP) Study Project	Non-Rule Related April 28, 2016 Hydraulic Model Meeting Summary	5/10/16 6/1/16 CRAI; 7/12/16 Resubmitted	Pending
289	11540010	Mt. Airy Receiving Sewer Upgrade	Legislation	5/11/16	Pending
290	11143260	CSO 21 I-75 Reconstruction Coordination	Legislation	5/11/16	Pending
292	10240665	Mill Creek WWTP Septage Receiving Station Odor Control Improvements	Legislation	5/11/16 5/19/16 CRAI; 5/26/16 Resubmitted 6/3/16 CRAI; 6/9/16 Resubmitted 6/15/16 CRAI; 7/14/16 CRAI; 7/14/16 Resubmitted 8/1/16 CRAI; 8/1/16 Video Submitted	Pending
294	10280114	SCADA System Installs and Upgrades	Legislation	5/12/16 5/19/16 CRAI 6/9/16 Resubmitted 7/6/16 CRAI; 7/8/16 Resubmitted 7/19/16 Resubmitted; 8/8/16 CRAI; 8/9/16 Resubmitted 8/10/16 CRAI;8/23/16 Resubmitted 8/30/16 CRAI	Pending
295	10240430	Berkley Avenue Sewer Replacement	Legislation	5/12/16 5/19/16 CRAI; 6/2/16 Resubmitted 6/9/16 Resubmitted 7/1/16 CRAI;7/29/16	Pending
296	10370025	Kenwood Hills Local Sewer	Other Reports – Release of Funds	5/12/16 5/23/16 CRAI	Pending
297	10270170	CSO 83 and 472 Dynamic Underflow Control	CIP and Operating Budget Preparation	5/13/16 5/27/16 CRAI; 7/14/16 Resubmitted 8/3/16 CRAI	Pending
298	11243840	CSO 127 and 128 Stream Separations	Performance Report	5/13/16 6/20/16	Approved w/conditions



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CR#	Project ID	Name	Category	Submitted	Response
299	10240012	Sharon Industrial Park Pump Station Replacement	Construction Change Order 001	5/17/16 6/2/16 CRAI; 7/27/16 Resubmitted 8/9/16	Approved w/follow-up
301	10171580	CSO 54 Improvements	Program Contingency 0001	5/20/16 6/2/16 CRAI	Pending
304	10142020	Daly Road Sewer Replacement	Construction Change Order 001	5/20/16 6/2/16 CRAI 8/30/16	Approved
305	11140010	SSO 700 IWAP	Non-Rule Related Task 2.6.2.2 Selection of Initial EMCs Technical Memorandum	5/26/16 6/15/16 CRAI	Pending
307	WWC Operating	Sewer CCTV Video Inspections / Pipeline Cleaning & Pigging Services/ Underground Asset Electronic Locating & Surveying	Work Order #310000697	6/1/16 6/15/16	Approved w/conditions
308	CIP Allowances	De-Legislation of Capital Improvement Plan Allowances	Legislation	6/9/16	Pending
309	11240270	Queen City Avenue Sewer Separation Phase 1	Programmatic Contingency 0012 & 0013	6/10/16 6/20/16 CRAI	Pending
310	11240000	Lick Run Valley Conveyance System	MOU MSD-DOTE VCS Design	6/10/16 6/30/16 CRAI;	Pending
311	10240380	CSO 005 Water	CIP and Operating	6/10/16 6/20/16 CRAI;	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		Connection	Budget Preparation		
312	Operating	MSD Financial Statements	For Your Information	6/13/16 6/20/16 Resubmitted	Pending
313	10240335	3568 Bogart Avenue Sewer Replacement	Legislation	6/14/16 6/24/16 CRAI; 6/30/16 Resubmitted 7/6/16 LDR; 7/7/16 Resubmitted	Pending
315	11240110	Quebec Road Sewer Separation	Legislation	6/22/16 7/6/16 CRAI; 7/6/16 & 7/12/16 Resubmitted 8/17/16	Advanced to BoCC
316	10240380	CSO 005 Water Connection	Legislation	6/22/16 7/6/16 CRAI; 7/12/16 Resubmitted 8/17/16	Advanced to BoCC
317	10143220	CSO 179 Sewer Separation	Legislation	6/22/16 7/6/16 CRAI; 7/8/16 Resubmitted 7/14/16 Meeting 7/19/16 Resubmitted 8/25/16 Resubmitted	Pending
318	Operating	De-Legislation of CIP	Legislation	6/23/16 7/12/16 7/19/16 Resubmitted 8/9/16	Advanced to BoCC
319	10230065	Muddy Creek Electrical	Construction Change Order E5	6/24/16 6/28/16 CRAI; 7/5/16 Resubmitted	Pending
320	10240565	Overflow Parking Lot of MSDGC Engineering and Administration Buildings	Non-Rule Related Drawings/Specs/Estimate	6/28/16 7/29/16 & 8/29/16 CRAI	Pending
321	10240275	SSO 603 & 704 Improvements	Legislation	6/30/16 7/29/16 CRAI; 8/3/16 Legislative Mtg. 8/5/16 Email to Aluotto 8/25/15 Resubmitted	Pending
322	10280800	WWT Asset Management System Implementation	Legislation	7/5/16, 7/8/16, 7/11/16, 8/9/16 8/11/16 CRAI; 8/11/16 Resubmitted	Pending

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CR#	Project ID	Name	Category	Submitted	Response
323	11240020	CSO 181 Real Time Control	Program Contingency 001	7/6/16 7/29/16	No Action Required
324	10240395	Winton Woods Diversion Gate Replacement	Program Contingency 002	7/6/16 8/31/16 CRAI	Pending
325	10280186	WWT System Asset Renewal 2016 - MCWWTP Dewatering Centrifuge Rotating Assembly	Legislation	7/8/16 8/5/16 CRAI; 8/10/16 Resubmitted 8/30/16 Resubmitted	Pending
326	10230031	CSO 404, 405, 410, 411 Outfall Reconstructio n	Legislation	7/10/16 7/29/16 CRAI; 8/2/16 Resubmitted	Pending
327	10240435	Pleasant Run Central Force Main Repairs	Legislation	7/10/16 7/31/16 CRAI; 8/2/16 Resubmitted 8/4/16 CRAI; 8/16/16 Resubmitted 8/17/16 CRAI; 8/18/16 Resubmitted	Pending
328	10240685	Division of Industrial Waste Building Roof Replacement	Legislation	7/11/16	Pending
329	N/A	Mill Creek and Septage Receiving Odor Control	For Your Information	7/13/16	Pending
330	11143260	CSO 21 I-75 Reconstructio n Coordination -	For Your Information	7/19/16	Pending
331	10280114	SCADA Installs and Upgrades	Construction Change Order 002	7/25/16 8/30/16 CRAI	Pending
332	10280186	WWT System Asset Renewal 2016 - Harper PS	Allowance Funded Construction Project	7/26/16	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		Raw Sewage Pump Purchase	Exceeding \$25,000		
333	10240054	DIW Office and Lab Improvements Phase 2	Construction Change Order 004	7/27/16 8/9/16	Approved
334	11240000	Lick Run VCS	Legislation	8/5/16 8/8/16 Resubmitted	Pending
335	11140010	SSO 700 IWAP	Non-Rule Related	8/9/16	Pending
336	N/A	Fitzpatrick Sewer Cleaning	For Your Information	8/11/16	Pending
337	11240270	Queen City Sewer Separation Phase 1	Construction Change Order 006	8/12/16 8/31/16 CRAI	Pending
338	Operating	2017 Operating Budget Request	Annual CIP Budget Request	8/15/16	Pending
339	10199017	2017 Capital Improvement Program Budget Report	Annual CIP Budget Request	8/15/16 8/16/16 CRAI; 8/16/16 Resubmitted 8/30/16 CRAI	Pending
340	11240001	Lick Run Property Demolitions, Phase G	Legislation	8/15/16	Pending
341	10270007	Dry Run Area Sewers Phase 2 Contract RB -	Legislation	8/15/16 & 8/26/16	Pending
342	11243140	CSO 217/483 Source Control Phase A	Legislation	8/15/16	Pending
343	11530001	Upper Muddy Creek Interceptor Replacement Contract A	Legislation	8/16/16	Pending

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CR#	Project ID	Name	Category	Submitted	Response
344	10171580	CSO 54 Improvements	Legislation	8/16/16	Pending
345	10240540	Spring Grove Av, Township St. Sewer Improvements	Legislation	8/16/16	Pending
346	10240700	Mill Creek WWTP Security Enhancements	Legislation	8/16/16	Pending
347	10143920/10143940	CSO 194 High Point Sewer Separation/C SO 195 Sewer Separation	Storm Water Separation Policy	8/16/16 & 8/24/16	Pending
348	10240291	MC WWTP Solids Handling Improvements Phase 1	For Information Only	8/18/16 by County 8/25/16 & 8/26/16 CRAI 8/29/16 Resubmitted; 8/30/16 CRAI	Pending
349	10230065	Muddy Creek WWTP Electrical Upgrades	Legislation	8/22/16 9/1/16 CRAI	Pending
350	10270180	LMWWTP Storm Water Realignment	Construction Change Order 001	8/23/16 8/31/16 CRAI; 8/31/16 Resubmitted	Pending
351	10280316	Emergency Sewer Repairs 2016	Allowance Funded Construction Project Exceeding \$25,000	8/23/16	Pending
352	10143920	CSO 194 High Point Sewer Separation	Legislation	8/26/16 8/29/16 Resubmitted	Pending
353	N/A	CIP Programmatic De-Legislation	Legislation	8/27/16	Pending
354	N/A	De-Legislation of Capital	Legislation	8/29/16	Pending

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CR#	Project ID	Name	Category	Submitted	Response
		Improvement Plan Projects			
355	10130740	Werk & Westbourne EHRT Facility	Non-Rule Related WPCLF Loan Application	8/30/16	Pending
356	N/A	Septage Receiving Trench Drain	For Your Information	8/31/16	Pending
357	10800028	Exception To Article II, Section 206 - 101 Landy Lane	Legislation	8/31/16	Pending
358	N/A	MSD Finance Process Mapping	For Your Information	8/31/16	Pending
359	Operating	2016-2nd Qtr. Financial Review (revised 8-25-2016)	For Your Information	8/31/16	Pending

\*CRAI = County request for additional information

The following projects were submitted by MSDGC for consideration and discussion with the County monitor team during 2015 and remain in the monitor's domain without forwarding to the BoCC for consideration; MSD considers these projects critical and in need of resolution. Projects will continue to be listed for documentation purposes and to highlight the risks associated with projects with special conditions of note.

- 11530001 Upper Muddy Creek Interceptor Replacement:** Construction legislation was submitted to the County on November 16, 2015. This project is important for coordinating construction with the Werk & Westbourne EHRT project. While the project is not required in order to operate the EHRT, the section of interceptor to be constructed with this project transverses the Werk & Westbourne site. If the project is not constructed in advance of the EHRT facility, additional design will be required to re-design interceptor alignment. County concern with sizing of pipe in advance of completing the SWM Model." MSDGC disagrees with this approach.
- 10240480 Mill Creek WWTP Dewatering Polymer System Replacement:** There was a meeting on May 4, 2016 between attorneys to resolve the outstanding issues but the project remains at a standstill. Construction legislation was submitted to the County on November 17, 2015. Consistent dewatering performance is essential to every treatment facility that is equipped with incineration. A properly functioning polymer system is crucial to the reliability and service of the dewatering process. As a result of the District-Wide Solids Handling Master Plan, it is the opinion of the engineer that the scope of this project is appropriate and should be implemented in 2016. At this time, the County monitor has not advanced this request to the BoCC and did not include the project in the 2016 CIP.

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Polymer project was discussed during March 2, 2016 meeting with the County. County requested a third party project review. This would be the third review of project scope; the first two reviews came to same conclusion. The project was discussed during a meeting on July 26<sup>th</sup>. A third party review will be completed.

- **10270195 Little Miami WWTP Solids Disposal.** The County and the City policy makers need to determine an agreed upon plan of which MSD stands ready to implement. The MSD Director provided a recommendation in the Little Miami WWTP Incineration Improvements Preliminary Engineering Feasibility Analysis. Recommendation requests County to appropriate and expend design funds to affirm prior BOCC resolution dated October 14, 2015 to prepare plans and specifications for the Little Miami WWTP solids disposal improvements. Action would result in issuance of Request for Proposals (RFP) with the intent to pursue the recommendation contained in the Preliminary Engineering Feasibility Analysis' Alternative 4C.
- **10240291 Mill Creek WWTP Solids Handling Improvements Phase 1.** The project has been on hold by the County's monitor for over a year. After some modification while on hold, the project is now 100% complete and the OEPA Permit to Install was received on February 24, 2016. When constructed, the project will improve sludge handling efficiency and substantially improve odor control of the Mill Creek campus. The project was discussed during two meetings on July 26<sup>th</sup> and July 27<sup>th</sup>. Commissioner Portune agreed to move the project forward to BoCC.
- **SSO 603/704 Improvements.** Construction authorization submitted 11/2015 for \$1.7M; Construction of this project has been on hold since November 2015, This project is about remediation of existing SSOs near a school property that MSD has observed occurring during storms as small as a 6-month storm, a condition that vastly outweighs a risk of uncertain potential future downstream overflow at a 10-year storm. MSD recommends this SSO 603/704 remediation project be completed as soon as possible.

**Risk Management**

MSD assess risks to its Capital Improvement Program and with implementation of the Consent Decree. The following table presents an overview of risks under evaluation. These risks can only be properly mitigation with full cooperation from both the City and County; specific project risks are noted in other locations of this document.

**Table 4 – Risks for Capital Program & Consent Decree Implementation**

Risk	Mitigation Strategy
Failure to Meet Consent Decree Requirements	MSD is committed to meeting Consent Decree milestones and when there is a risk to meeting those deadlines; MSD develops mitigation options to address cause of delay. Mitigation of this risk requires an agreement with the County and MSD to advance projects expeditiously – even if detailed information is not ideal. The City Solicitor's and County Prosecutor's office have initiated meetings to discuss legislative needs of critical projects

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Risk	Mitigation Strategy
	and obtain consensus; a formal process is being initiated to reduce delays associated with funding and approvals, with the first legislative meeting scheduled for early July.
Insufficient Funding of District Operations	MSD will continue to issue financial reports on a quarterly and monthly basis.
Affordability Issues for Phase 2 WWIP	The Phase 2 program is an affordability based schedule. MSD has provided the County team with preliminary Phase 2 affordability and financial capability analysis; MSD continues to make progress on this effort. MSD received questions and comments from the County on the Affordability Study and has provided responses.
Inability to Meet Cash Flow Forecast	Ambiguities in budget approval may impair the district's ability to expend capital in accordance with the forecast developed for the CIP. The City Solicitor's and County Prosecutor's office have initiated meetings to discuss legislative needs of critical projects and obtain consensus.
Insufficient Funding for Asset Management Needs	MSD remains concerned with the lack of funding approved for key asset management projects – particularly for solids related requests for Little Miami and Mill Creek WWTPs. The Emergency Sewer Repairs Allowance is forecasted to have funding to conduct repairs only through September 2016; a request has been made through CR 351 to utilize the Critical Asset Management allocation.
Overreliance on Hydraulic Model for Routine Functions	MSD issued a draft version 4.0 of its Model Guidelines based on the comprehensive Model Review completed in February and the new County Modeling Rule. MSD has determined that its Guidelines will be finalized after reviewing WaPUG guidelines for continuous calibration expected in 2017. MSD will do this in consultation with County with respect to consistency with Model Rule. Best professional judgment will be used to ensure good, sound engineering practices are used and industry standards are followed.
Future of 1968 Agreement & Corresponding Impacts	The future of the District remains of high concern to staff and ratepayers. The risk of the unknown can be mitigated by the County and City leadership committing to face-to-face discussions. Mitigation of this risk is beyond MSD's control.
New Regulatory Requirements = Unfunded Mandates	MSD continues to monitor regulations and has developed a positive working relationship with Ohio EPA and USEPA. As regulations are drafted and proposed, MSD will present the potential impact on the District to the County. Future CIPs may need to budget for work that is currently considered unfunded mandates.
Succession Planning for Staff	With a high percentage of employees eligible for retirement and separate challenges faced with employee retention, succession



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Risk	Mitigation Strategy
	planning is important for the organization. MSD continues to reduce supplemental staff and attract/retain in-house talent to reduce reliance on long-term contracting.
Security and Safety Breaches	MSD has conducted some evaluations and analysis and is proceeding accordingly to enhance safety and security.

**Significant Upcoming Events**

Meetings Forecasted for September 2016

- Watershed Action Team Meeting – September 2<sup>nd</sup>
- Regional Emergency Operations Center – September 7<sup>th</sup>
- Mayor of Nancy Visit – September 14<sup>th</sup>
- River Network’s Integrated Water Management Webinar – September 14<sup>th</sup>
- Ukraine Delegates Wastewater Treatment Plant Tour – September 16<sup>th</sup>
- Emergency Operations Center – Overview – September 20<sup>th</sup>
- Certified Reliability Leader Workshop – September 21<sup>st</sup> – 22<sup>nd</sup>
- Cincinnati State Health & Safety Fair – September 21<sup>st</sup> – 22<sup>nd</sup>
- Green Umbrella Meeting – Watershed Policy Committee Meeting – September 27<sup>th</sup>

Meetings Forecasted for October 2016

- Hamilton County Environmental Action Commission – October 6<sup>th</sup>
- Watershed Action Team Meeting – October 7<sup>th</sup>
- Green Infrastructure Meeting with Various Agencies – October 13<sup>th</sup>
- Green Umbrella Meetings – Watershed Policy Committee Meeting – October 25<sup>th</sup>
- Green Infrastructure Meeting with Various Agencies – October 27<sup>th</sup>

**CAPITAL PROJECTS OVERVIEW**

MSD had a total of 298 active capital projects during August 2016 (excluding projects with pending business case evaluations). The projects are divided into five distinct categories:

- WWIP projects (as defined under Attachments 1A, 1B, and 2 of the Consent Decree)
- Asset Management (AM) projects
- Sustainable Infrastructure (SI) projects
- Local Sewers & Lateral projects
- Business Case Evaluation (BCE) projects (collections and facilities).

This section of the monthly report also identifies projects in the permitting phase and provides a 90-day forecast for projects approaching Substantial Completion/Beneficial Use.

## **Wet Weather Improvement Program Projects**

MSD has completed 71 of the required 100 milestones defined in Attachment 1A of the Final WWIP. MSD has constructed 97 of the defined projects listed in Attachment 1B of the Final WWIP which are being completed under 133 separate construction contracts; of which 105 have finished construction. Through August 31, 2016, MSD has completed 100% of the 13 PTI Application milestones; 89% of the 18 Start Construction milestones; and 59% of the 69 Finish Construction milestones. The milestones have been revised based upon the definition of a WWIP “bundle”. Attachment 1A of the Final WWIP identifies a total of 8 bundles. Each of these bundles includes multiple projects required to fully comply with the WWIP. Each grouping of projects has one PTI submittal and one Construction Start milestone that are satisfied when the first bundle project is submitted and issued a Notice-to-Proceed. Each project within a bundle must satisfy the Construction Finish milestone. The following graph reflects the bundle implementation plan confirmed with the Consent Decree Regulators in 2015. Every project, including each LMCPR project, is listed for its Construction Finish Milestone. Each bundle has one PTI submittal Milestone and one Construction Start Milestone. As was anticipated when the Final WWIP was approved, all Phase 1 projects must be completed by 2018 and hence the final Phase 1 year (2018) has the most required Construction Finish Milestones.

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**Table 5 – Projects with Remaining WWIP Milestones**

<b>ID</b>	<b>Projects with Remaining Milestones</b>	<b>PTI Milestone</b>	<b>Start Milestone</b>	<b>Finish Milestone</b>	<b>Most Critical Milestone (FLOAT)</b>
10130740	Werk & Westbourne EHRT	Done	Done	12/31/2017	Finish (-80)
10131180	Muddy Creek WWTP Dewatering Improvements	Done	Done	6/30/2017	Finish (64)
10131220	Glensview Pump Station	Done	12/31/2017	12/31/2018	Start (242)
10141080	Ludlow and Lafayette Parallel Sewer	Done	12/31/2017	12/31/2018	Start (0)
10142020	Daly Road Sewer Replacement	Done	Done	12/31/2016	Finish (93)
10143920	CSO 194 High Point Sewer Separation	Done	Done	06/30/2017	Finish (-85)
10143220	CSO 179 Sewer Separation	Done	12/31/2017	12/31/2018	Start (397)
10143940	CSO 195 Westwood Northern Separation	Done	Done	6/30/2017	Finish (-85)
10170080	SSO 1000 Elimination	Done	Done	12/31/2018	Finish (116)
10170100	SSO 228 Elimination	Done	Done	12/31/2018	Finish (101)
10171580	CSO 54 Improvements	Done	Done	12/31/2018	Finish (147)
10171740	CSO 551 Improvements	Done	Done	12/31/2018	Finish (83)
10240018	CSO 125 Stream Separation	Done	Done	12/31/2018	Finish (-44)
10240021	CSO 217/483 Source Control Phase C	Done	Done	12/31/2018	Finish (16)
11243140	CSO 217/483 Source Control Phase A	n/a	Done	12/31/2018	Finish (172)
11243141	CSO 217/483 Source Control Phase B	Done	Done	12/31/2018	Finish (-115)
11243142	CSO 217/483 Source Control Phase A2	Done	Done	12/31/2018	Finish (37)
11240000	Lick Run Valley Conveyance System	Done	Done	12/31/2018	Finish (12)
11240001	Lick Run Property Demolitions	n/a	Done	12/31/2018	Finish (578)
11240010	Sunset Ave. Sunset Ln. & Rapid Run	n/a	Done	12/31/2018	Finish (327)
11240020	CSO 181 Real Time Control	Done	Done	12/31/2018	Finish (47)
11240030	Wyoming and Minion Ave. Separation	Done	Done	12/31/2018	Finish (349)
11240090	White Street Sewer Separation	Done	Done	12/31/2018	Finish (625)
11240110	Quebec Rd. Sewer Separation	n/a	Done	12/31/2018	Finish (45)
11240130	Queen City Ave. Separation Ph. 2	Done	Done	12/31/2018	Finish (-57)
11240150	Queen City and Cora Aves R/W Sewer Separation	Done	Done	12/31/2018	Finish (366)
11240170	Quebec Heights Sewer Separation	Done	Done	12/31/2018	Finish (328)

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## Figure 1 – Consent Decree Milestones Status

	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Required Milestones	100	12	13	3	4	7	5	9	8	10	29
Completed Milestones	71	12	13	3	4	7	5	9	7	4	7
		10120360	10120420	10120460	10120460	10120460	10131240	10142020	10130740	10130740	10131220
		10120420	10130560	10144441	10144441	10130740	10142020	10142240	10131220	10131180	10141080
		10141440	10130565	10170081	10170081	10131180	10142240	10143920	10142020	10131220	10143220
		10141520	10130680		10171840	10131240	10144884	10143940	10143220	10131240	10170080
		10142440	10141540			10142240	10145560	10143960	10143960	10143220	10170100
		10144884	10141560			10144880		10145500	10145560	10143920	10171580
		10145180	10144880			10171840		10145560	10171780	10143940	10171620
		10145280	10144884			10171860		10145580	11240050	10143960	10171740
		10145300	10145320			10171900		10171840		10171780	10171780
		10150012	10160005			10171920		10171860		11240050	10240018
		10170560	10160010			10171980		10171900			10240021
		10172090	10170780					10171920			11040010
			10180600					10171980			11240000
											11240001
											11240010
											11240020
											11240030
											11240050
											11240051
											11240090
											11240110
											11240130
											11240150
											11240170
											11240270
											11243140
											11243141
											11243142
											11243840
milestones completed											
projects in design											
projects under construction											

**Notes:**

1. Planning for 10170080, 10170100, 10171580, and 10171620 completed under Upper Duck Bundle Planning (10170000).
2. Design for 10171740 and 10171780 under Oakley Station Project (10171741).
3. Project 10143920 includes sub-project 10143923 to accommodate right-of-way needs.
4. Project 10143940 includes sub-projects 10143942 and 10143943 to accommodate right-of-way needs.
5. Project 10143960 includes sub-projects 10143962 to accommodate right-of-way needs.
6. Project 10171860 includes sub-projects 10171861, 10171862, and 10171863 to accommodate right-of-way needs.
7. Projects 10131240 and 10131180 are within a defined bundle of work. Construction was started for the bundle in 2014. Construction finish milestone extended to June 2017.
8. Projects 10171980, 10171920 and 10171900 are within a defined bundle of work. Construction was started for the bundle in 2012 and completed in 2015.
9. Projects 10143920, 10143940 and 10143960 are within a defined bundle of work. Construction was started for the bundle in 2013.
10. The PTI, construction start, and construction finish milestones for Project 10131220 were revised by the Regulators in 2013.
11. The construction start milestone for Project 10130740 was extended by the Regulators to March 2016.
12. Projects 10145500 and 10145580 were moved to coordinate with Phase 2 Project 10144882 during 2014 Adaptive Management discussions.
13. Projects 10170080, 10170100, 10171580, 10171620, 10171740, and 10171780 are within a defined bundle of work. Construction was started for the bundle in 2013.

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Table 6 – Phase 1 Completed WWIP Projects

COMPLETED WWIP ATTACHMENT 1B PROJECTS - AUGUST 2016		
INDEX		
1	10141660	Norman Ave.
2	10141480	Mill Rd. Sewer
3	10142040	Compton Rd.
4	10144980	Ross Run Grit Pit
5	10170040	SSO 570 & 1017 in Madeira
6	10141260	Springdale - Sharonville Sewer
7	10141720	Goodman Ave.
8	10145120	Eggleston & Bold Face
9	10170820	Gungadin/Paddison Rd.
10	10141700	Mill Creek WWTP Aux. Air Supply
11	10141200	Northbrook SSO 628
12	10145400	Samoht Ridge
13	10141220	North College Hill
14	10141740	St. Clair Sewer
15	10141580	Mill Creek WWTP Replacement Screens Ph1
16	10145000	Mitchell Ave.
17	10141240	Sewer 155 Cooper Creek
18	10141300	Camberly Acres PS
19	10170020	SSO 1053 East Fork Ave. Grating
20	10141400	Deer Park
21	10144940	Sawyer Point
22	10141880	Laboiteaux Ave.
23	10110300	Durango Green - Shadely Lane PS
24	10150000	Polk Run WWTP Ph 2 STO
25	10150240	Maple Ave.
26	10144920	Harrison & State Ave. West 4
27	10145020	Montana Ave.
28	10141680	406 Elliot Ave.
29	10145080	Eastern Ave. (Collins to Bayou)
30	10170940	Stewart Rd. East Regulator
31	10141360	Garden Hills PS
32	10141620	Mill Creek WWTP Solids Mgmt Centrifuge Procurement
33	10144960	Harrison & State Ave. West 3
35	10141760	Mill Creek WWTP Raw Sewage Pumps
36	10120400	Arrow St. WWTP Elimination & North Bend Crossing
37	10141640	Mill Creek WWTP Solids Mgmt. Centrifuge Install.
38	10144900	Ludlow Run

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INDEX	COMPLETED WWIP ATTACHMENT 1B PROJECTS - AUGUST 2016	
39	10145240	Este Ave.
40	10145140	Givaudan Sewer
41	10170060	Mariemont SSO Elimination 679A, 679B & 680
42	10171420	Archer St. Div Dam, HDW
43	10171820	Beechmont Sluice Gate Rehabilitation
44	10141500	Pleasant Run PS
45	10170800	Berkley Woods PS
46	10120340	Streamwood Pump Station
47	10141380	N. Bend Rd./Connecticut Sewer
48	10141820	SSO 700 CEHRS Treatment Facility
49	10170840	Johnson Rd. PS
50	10142000	W. Branch Mill Creek SSO 574
51	10141420	Centurion Estates PS
52	10141600	Mill Creek WWTP Replacement Screens Ph2
53	10141340	Greenridge PS
54	10150011	Polk Run WWTP PS Elimination Sewer Ph3A
55	10145200	Butler St.
56	10172200	Broadview Dr./Country Club, SEP
57	10141780	Arrowhead Ct. PS & Marview Terrace PS
58	10145040	West 3rd St., Ph3 CSO 437
59	10130420	Wulff Run Rd.
60	10145220	Ross Run CSO 487 Twin Outfall
61	10145100	Ross Run
62	10160000	Sycamore WWTP Ph 1&2
63	10131200	Mt. St. Joseph Sewer Replacement
64	10120380	Hengehold 4th & Yates 3rd PSE
65	10141839	McGrew Ave. PSU
66	10120360	Pebble Creek WWTP
67	10142440	7601 Production Dr. Grating
68	10172090	Kenwood Rd. PSE
69	10150012	Polk Run WWTP Expansion Ph3B
70	10141440	Millbrook 1 PSU
71	10170560	Woodruff Rd. @ 8 Mile/Britney Acres PSU
72	10141520	Arrowood PSE
74	10145280	Mitchell Ave. RTC
75	10145300	Badgeley Run RTC
76	10145180	Mill Creek Interceptor Diversion Chamber
77	10145320	Lick Run RTC
78	10130560	Muddy Creek WWTP Secondary Enhancement
79	10130565	Muddy Creek WWTP Effluent Pump Upgrade
80	10170780	LM WWTP, Activated Sludge Thickening
81	10130680	Harwinton Lane

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INDEX	COMPLETED WWIP ATTACHMENT 1B PROJECTS - AUGUST 2016	
82	10141540	Winton and Sherwood Ph1 PS
83	10141560	Winton and Sherwood Ph2 PS
84	10160005	Sycamore WWTP Ph 3
85	10160010	Sycamore WWTP Ph 4
86	10180600	Mill Creek WWTP, TPE Incinerator
87	10120420	Diamond Oaks, Windmere 3rd & Regency Ridge PS
88	10170081	Montgomery Rd & Lester Ave
89	10144441	1852 Columbia Pkwy Sewer
90	10144880	Mill Creek WWTP Grit Removal
91	10120460	Towers East Pump Station
92	10144884	Mill Creek WWTP Secondary Treatment Enhance. -
93	10171980	Eastern Delta Ave. Ph1
94	10171920	Eastern Delta Ave. Ph2
95	10171900	Eastern Delta Ave. Ph3
97	10142240	Blue Rock Rd. Sewer Separation
98	10171840	CSO 471 Grandin Rd. Reg. Improvements
99	10171860	CSO 470 Eastern Ave. Sewer Separation
104	10145560	Mill Creek WWTP Secondary Bypass Weir
108	10143960	CSO 525 Mt. Airy Grating Sewer Separation
112	11240050	Harrison Avenue Sewer Separation Phase A
112	11240051	Harrison Avenue Sewer Separation Phase B
112	11240270	Queen City Ave Sewer Separation Phase 1
112	11243840	CSO 127 & 128 Stream Separations
112	11040010	Rapid Run Park Source Control
117	10171620	CSO 187 Improvements
119	10171780	CSO 553 Sewer Separation

**Table 7 – Remaining Phase 1 WWIP Projects**

INDEX	REMAINING WWIP ATTACHMENT 1B PROJECTS - AUGUST 2016	
96	10131220	Glenview PS at Wesselman
109	10130740	Werk & Westbourne EHRT
100	10131180	Muddy Creek WWTP Dewatering
101	10131240	Muddy Creek WWTP Grit Replacement
110	10141080	Ludlow and Lafayette Parallel Sewer
102	10142020	Daly Road Sewer Replacement
106	10143920	CSO 194 High Point Sewer Separation



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REMAINING WWIP ATTACHMENT 1B PROJECTS - AUGUST 2016		
111	10143220	CSO 179 Sewer Separation
107	10143940	CSO 195 Westwood Northern Sep.
114	10170080	SSO 1000 Elimination
115	10170100	SSO 228 Elimination
116	10171580	CSO 54 Improvements
118	10171740	CSO 551 Improvements
112	10240018	CSO 125 Stream Separation
112	10240021	CSO 217/483 Source Control Phase C
112	11243140	CSO 217/483 Source Control Phase A
112	11243141	CSO 217/483 Source Control Phase B
112	11243142	CSO 217/483 Source Control Phase A2
112	11240000	Lick Run Valley Conveyance System
112	11240001	Lick Run Property Demolitions
112	11240010	Sunset Ave. Sunset Ln. & Rapid Run
112	11240020	CSO 181 Real Time Control
112	11240030	Wyoming and Minion Ave. Separation
112	11240090	White Street Sewer Separation
112	11240110	Quebec Rd. Sewer Separation
112	11240130	Queen City Ave. Separation Ph. 2
112	11240150	Queen City and Cora Separation
112	11240170	Quebec Heights Sewer Separation

Table 8 – Projects Forecasting Consent Decree Penalties

ID	Project	Forecasted Delay (days)	Forecasted Penalty	Issues
<b>Projects with Forecasted Delay Penalties (&lt;0 days float)</b>				
10130740	Werk & Westbourne EHRT	-80	\$235,000	Finish milestone penalty a possibility. Construction legislation has been obtained from the County. Delay was a result of re-negotiation of the project scope of work during 2014-2015. Construction contract provides incentives for completing work by Consent Decree completion date.
11243141	CSO 217/483 Phase B	-102	\$241,000	Project need additional design due to right-of-way issues and community input. Tank is being moved to a new location.
10143920	CSO 194 Separation	-85	\$210,000	Redesign based on updated modeling results is complete. CSO 194 and



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				CSO 195 projects will proceed separately (and have separate PTIs). Legislative request for construction approval is scheduled for September 2016 adoption. MSD recommends Stormwater Policy (Section 2407) evaluation and BMP design to proceed in parallel to legislative and procurement activities and then integrated into the final plans by addendum or as a separate project(s).
10143940	CSO 195 Separation	-85	\$210,000	Redesign based on updated modeling results is underway; 100% plans/specifications/estimate of cost is scheduled to be submitted to MSD 9/20/2016. CSO 194 and CSO 195 projects will proceed separately (and have separate PTIs). Legislative request for construction approval is scheduled for November 2016 adoption. MSD recommends Stormwater Policy (Section 2407) evaluation and BMP design to proceed in parallel to legislative and procurement activities and then integrated into the final plans by addendum or as a separate project(s).

**Projects with High Potential for Delay Penalties (<85 days float)**

ID	Project	Remaining Float (days)	Critical Milestone	Issues
10131180	Muddy Creek WWTP Dewatering Improvements	64	Finish	Project start was delayed due to County delays to approve construction legislation.
11240020	CSO 181 RTC	47	Finish	Need to accelerate design (90% design was finished 4-27-2016. Need to get right-of-way.)
10240021	CSO 217/483 Source Control Phase C	-5	Finish	Coordination issues
11240130	Queen City Phase 2	28	Finish	Utility Coordination with Duke and GCWW
10240018	CSO 125 Stream Separation	14	Finish	County delays with project design due to modeling concern.
11240000	Lick Run VCS	12	Finish	Project float critical
10141080	Ludlow & Lafayette Parallel Sewer	0	Finish	ROW is not anticipated to take as long as currently scheduled due to

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				coordination with other City Departments
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The current status of each project is identified on the monthly Program & Project Controls Scorecard and in Appendix A. Detailed project specific progress reports discussing budget, schedule, milestones, work completed, upcoming work, and project issues are uploaded to the projectgroundwork.org website every month for active WWIP projects. Appendix J includes a report on the remaining float for Phase 1 Consent Decree WWIP projects, exclusive of LMCPR Projects which are reported in Appendix F.

During August 2016, MSD spent \$479,194 on a total of 31 active WWIP projects. When completed, all Phase 1 WWIP construction projects will have been fully implemented and planning work for Phase 2 projects will have been advanced.

A summary of the status of the active WWIP projects is provided in the following table.

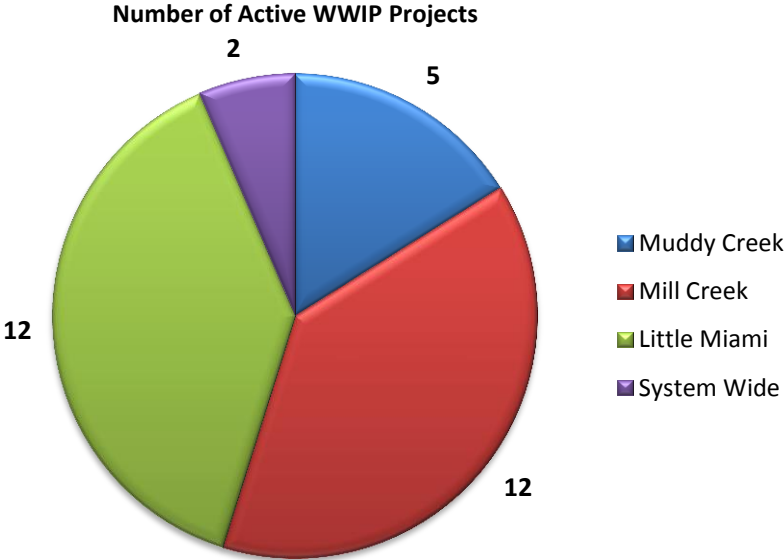
**Table 9 – Summary of Active WWIP Projects**

Current Project Activity	Number of Projects	Sum of Monthly Expenditures	Sum of Cumulative Costs
Closeout	10	\$17,514	\$60,819,123
Construction	4	\$278,774	\$21,755,506
Bid and Award	2	\$1,803	\$742,807
Design	10	\$131,650	\$4,167,992
Planning	5	\$49,453	\$11,367,963
<b>Active WWIP Projects</b>	<b>31</b>	<b>\$479,194</b>	<b>\$98,853,392</b>

The active WWIP projects are located throughout the District as shown in the following figure.

**Figure 2 – Active WWIP Projects by Watershed**

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### Asset Management Projects

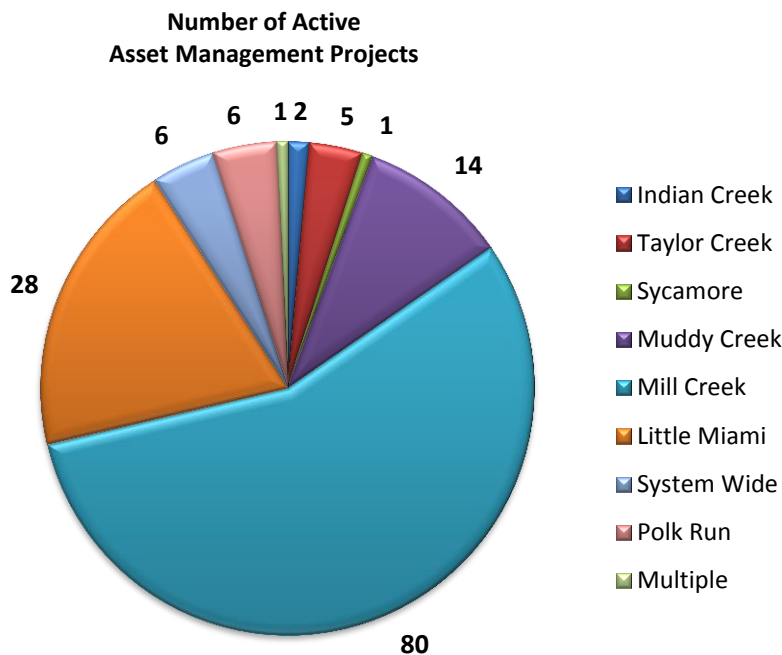
During August 2016, MSD spent \$2,185,956 on a total of 143 active Asset Management projects as summarized in the following table.

Table 10 – Summary of Active Asset Management Projects

Current Project Activity	Number of Projects	Monthly Expenditures	Cumulative Costs
Closeout	23	\$238,722	\$48,893,477
Construction	16	\$1,878,066	\$44,671,970
Bid and Award	8	\$3,473	\$1,097,084
Design/Right of Way	53	\$58,996	\$6,265,180
Planning	43	\$6,699	\$1,138,051
<b>Grand Total</b>	<b>143</b>	<b>\$2,534,409</b>	<b>\$102,065,761</b>

The active Asset Management projects are located throughout the District as shown in the following figure.

Figure 3 – Active Asset Management Projects by Watershed



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Active projects are comprised of the following project types:

- 25 Treatment Plant Projects
- 19 Pump Station Projects
- 78 Sewer Projects
- 1 SSO Elimination Projects
- 7 Study
- 2 IT Systems
- 9 CSO Projects
- 1 Regulator Improvement
- 1 Source Control

**Sustainable Infrastructure Projects**

During August 2016, MSD spent \$2,593,843 on a total of 42 Sustainable Infrastructure projects that were active as summarized in the following table. The cumulative costs shown for these projects include expenditures from two accounts – the 10180900 Sustainable Infrastructure Allowance and the assigned project ID.

**Table 11 – Summary of Active Sustainable Infrastructure Projects**

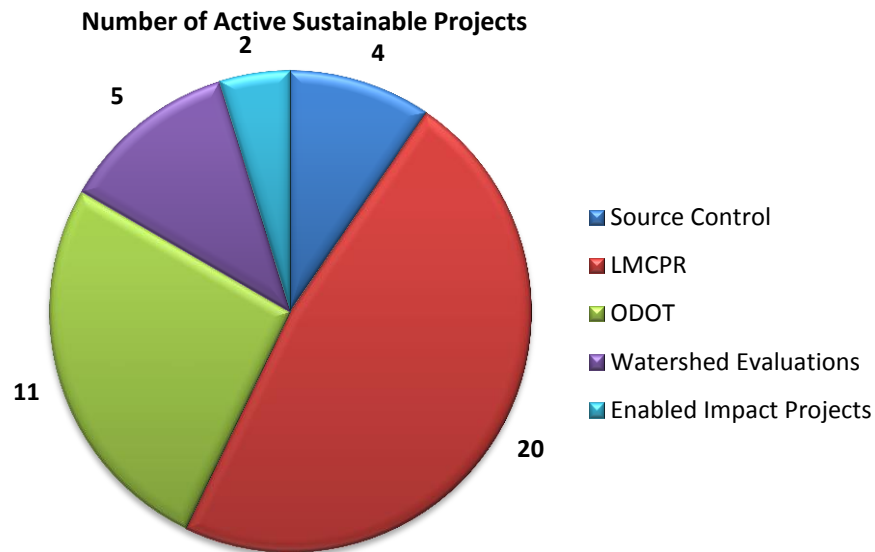
Current Project Activity	Number of Projects	Monthly Expenditures	Cumulative Costs
Closeout	7	\$17,460	\$19,116,645
Construction	6	\$1,979,142	\$17,319,350
Bid and Award	2	\$2,778	\$1,001,929
Design/Right of Way	16	\$516,406	\$53,659,718
Planning	11	\$78,056	\$9,844,440
<b>Active SI Projects</b>	<b>42</b>	<b>\$2,593,843</b>	<b>\$100,942,081</b>

Sustainable projects are dispersed throughout the District’s watersheds:

- 37 Projects in Mill Creek
- 2 Projects in Muddy Creek
- 1 Project in Little Miami
- 2 Projects System-Wide

**Figure 4 - Active Sustainable Projects by Watershed**

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A summary of the major Enabled Impact Projects is presented in the following table.

**Table 12 – Summary of Active Enabled Impact Projects**

Project Partner	Project Name	Green Infrastructure Type	Project Status	Estimated Annual Stormwater Removed (gal)	Status Summary
Mill Creek Watershed Council of Communities	Carl/Denham Ravine & Future CRC Improvements	Bioswale	Warranty	250,000	Construction and Grant is complete. Final invoice being processed.
Groundwork Cincinnati Mill Creek	West Fork Creek Riparian/Floodplain Restoration Project	Bioinfiltration Area	Design	510,000	The project is currently in the construction legislation phase. The construction is planned to start in 2016.
		Vegetated Swales			

### Local Sewer and Lateral Projects

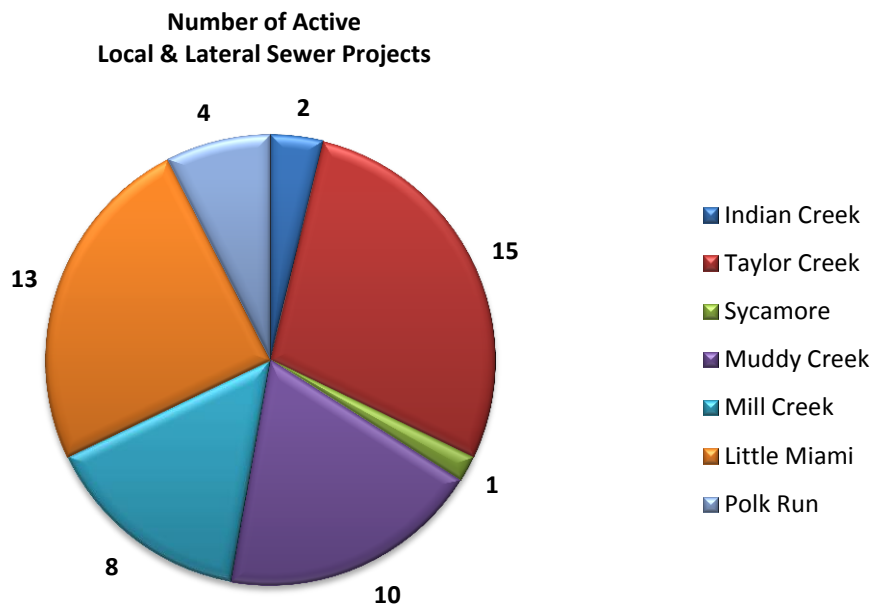
During August 2016 MSD spent \$26,496 on a total of 53 active local sewer assessment and lateral projects as summarized in the following table.

Table 13 – Summary of Active Local Sewer & Lateral Projects

Current Project Activity	Number of Projects	Monthly Expenditures	Cumulative Costs
Closeout	10	\$10,619	\$7,219,426
Construction	2	\$175	\$280,219
Bid and Award	3	\$0	\$93,907
Design/Right of Way	35	\$15,703	\$1,952,118
Planning	3	\$0	\$0
<b>Active Local/Lateral Projects</b>	<b>53</b>	<b>\$26,496</b>	<b>\$9,545,670</b>

The 24 active Local Sewer and 29 active Lateral Projects are located throughout the District as shown in the following figure.

Figure 5 – Active Local & Lateral Projects by Watershed



## Business Case Evaluations – Collections Capital Asset Planning Branch

A total of 43 projects were within the Collections Capital Asset Planning section of the Development Services Branch during the current reporting period. Project 12240070 Daly Road CSO Treatment Facility was transferred to the Facilities Project Management Branch. Collections Capital Asset Planning staff develop BCEs for sewer efforts and assist with storm water reviews and sewer availability requests within Development Services.

The number of sewer availability requests being addressed by the Plan Review section in the month demonstrates no net increase when compared to this month last year (Fifty-eight sewer availability requests were received in July 2015 and in July 2016). However, year-to-date, the sewer availability requests received is trending down as there is approximately a 10% increase when compared to this time last year. This represents about a 4-week backlog.

**Table 14 – Active Business Case Evaluations – Collection Capital Asset Planning Branch**

Project ID	Name	Status	Type
12230001	3731 Glenmore Avenue Sewer Evaluation	Pending	Sewer
12270075	5053 Ridge Avenue Sewer Replacement	Pending	Sewer
12240035	911 McPherson Avenue Sewer Replacement	Pending	Sewer
12240130	Auxiliary Mill Creek Interceptor & Channel Repair	Hold	Sewer
11142750	Brent Spence I-75 Reconstruction Coordination	Active	Sewer
12270125	Columbia Square Development Separation	Active	Sewer
12240340	Congress Run Stream Restoration/Bank Stabilization	Pending	Other
12240215	Cortlandt Avenue Sewer Replacement	Pending	Sewer
12240560	CSO 005 Flood Control Protection	Active	CSO
12240520	CSO 226 I-75 Reconstruction Coordination	Active	Sewer
12240570	CSO 449 Sewer Separation	Active	CSO
11142741	CSO 488/490 I-75 Reconstruction Coordination	Active	Other
12280045	CSO/SSO Relocation & Access Drive Improvements	Hold	CSO
12240060	Davey Avenue Sewer Replacement	Pending	Sewer
12270105	Delta Avenue Interceptor Grit Pit	Pending	Sewer
12240500	Depot Street Sewer Evaluation	Pending	Sewer
Not assigned	East Westwood Detention Basin	Pending	Sewer
12240355	Elm Court Sewer Replacement	Hold	Sewer
12270025	Harris Avenue Sewer Replacement	Pending	Sewer



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Project ID	Name	Status	Type
Not assigned	Harrison Avenue Improvements	Pending	Sewer
Not assigned	Hartford Place	Pending	Sewer
12240360	Harvey Ave – Hickman Ave Sewer Replacement	Pending	Sewer
12240490	Hickman Avenue Sewer Evaluation	Pending	Sewer
12240530	Hilltop Concrete Lateral Relocation	Active	Sewer
12240010	Ledgewood Avenue Sewer Replacement	Pending	Sewer
10240271	Lower Mill Creek HW/DW Protection	Active	CSO
12270065	Madison & Zumstein Sewer Replacement	Pending	Sewer
12240345	Mandarin Court Sewer Replacement	Pending	Sewer
12240025	McHenry Avenue Sewer Replacement	Pending	Sewer
12230350	Mill Creek Interceptor Condition Evaluation	Active	Sewer
12240550	Mill Creek Interceptor Crossover Gate Automation	Active	Sewer
10280122.38	Morrison Avenue Sewer Replacement	Pending	Sewer
10280123.03	Muddy Creek CSO HW/DW Protection	Hold	CSO
12240265	Old Ludlow Avenue Sewer Replacement	Pending	Sewer
12250010	Polk Run Trunk Sewer Evaluation	Pending	Sewer
12240295	Reading Road – 12 <sup>th</sup> Street to E. Liberty Street Sewer	Pending	Sewer
10280122.59	Regulator Analysis	Active	CSO
12240510	Rockdale and Windham Sewer Evaluation	Pending	Sewer
11242910	Thru the Valley I-75 Reconstruction Coordination	Active	Sewer
12240170	Valley Lane Sewer Replacement	Pending	Sewer
12240290	Warsaw Avenue Sewer Replacement	Pending	Sewer
12270056	Wasson Ravine Sewer Replacement-Additional Planning	Pending	Sewer
12230065	Werk Rd at Mercy High School Sewer Replacement	Pending	Sewer

**Business Case Evaluations – Facilities**

A total of 42 projects were undergoing planning during the current reporting period. Facilities Project Management Branch staff continues to develop BCEs for facilities projects, creating planning documents that investigate alternative solutions to resolve issues that were typically nominated by Wastewater Treatment Division. The planning process culminates with a proposed recommended solution which, if

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approved, can be design and/or managed by the Facilities Project Management Branch. The BCEs in development are:

**Table 15 – Active Business Case Evaluations - Facilities**

<b>Project ID</b>	<b>Name</b>	<b>Status</b>
10170789	Little Miami WWTP Bundle Planning	Active
10170810	LMWWTP Electrical Feeder	Active
10170811	LMWWTP Solids Handling Improvements	Active
10170812	LMWWTP Electrical and Disinfection Improvements	Active
10170813	LMWWTP Preliminary Treatment Improvements	Active
10170814	LMWWTP Primary/Secondary	Active
10170815	LMWWTP Four Mile Pump Station Improvements	Active
10180751	MSDGC High Rate Treatment Program Development	Hold
10221245	TCWWTP Disinfection Upgrade	Active
10240320	Wilder Avenue Sewer Replacement	Active
10240585	MCWWTP Two-Bay Solids Receiving Facility	Hold
10240600	MCWWTP Electrical Arc Flash Protection	Hold
10240605	MCWWTP Secondary Treatment Capacity Enhancements	Hold
10240610	MCWWTP Primary Sludge Pumping Improvements	Hold
10240615	MCWWTP Primary Settling and Primary Skimmings Thickening Building Odor Control Improvements	Hold
10240620	MCWWTP Biological Nutrient Removal Facilities	Hold
10240625	MCWWTP Standby Power Distribution System Improvements	Hold
10240635	Mill Creek WWTP Plant Influent and Headworks Odor Control Improvements	Hold
10240640	MCWWTP Biosolids Dewatering Facility Addition	Hold
10240660	MCWWTP Gravity Thickener Odor Control Improvements	Hold
10240665	Mill Creek WWTP Septage Receiving Station Odor Control Improvements	Undergoing Modification
10280122.29	MSD Backup Power Analysis Planning	Hold
10280123.14	Harcourt Estates PS Planning	Hold
10280123.15	Anderson Woods PS Planning	Hold
10280123.16	Ravens Run PS Planning	Hold
10280123.3	Newtown Interceptor Planning	Hold

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<b>Project ID</b>	<b>Name</b>	<b>Status</b>
10280123.67	MCWWTP Potable Water Reliability & Service Upgrade	Active
12220005	Honnert Ridge Pump Station Evaluation	Hold
12240140	MCWWTP Primary Settling Tank Rechainin MCWWTP Primary Settling Tank Mechanical Equipment Replacement	Hold
12240280	Locust View Pump Station Evaluation	Hold
12240320	Blanchetta 2 Pump Station Evaluation	Hold
12240330	Eastern Ave Pump Station Evaluation	Hold
12240540	Mill Creek Influent Conveyance and Capacity Assurance	Active
12250000	High Point Pump Station Evaluation	Hold
12250005	Sheldon Pump Station Evaluation	Hold
12270090	Turpin Lake Pump Station Evaluation	Hold
12230045	Stonebridge Apartments Sewer Study	Active
12240535	Stout and Pendery Avenue Sewer Capacity Evaluation	Active
12270130	Little Miami WWTP Incinerator Improvements	Active
12260025	South Clippinger Pump Station and Forcemain Upgrade	Active
12240151	Document Control Storage Enhancements	Active
12240516	Fort Scott WWTP Evaluation	Active
10230125	East Branch Muddy Creek Pump Station Upgrades	Active
12280050	Eider BDP – Backup Power Analysis	Active
12240070	Daly Road CSO Treatment Facility	Active

## **Hydraulic Model**

During the current reporting period, MSD performed several active tasks related to its hydraulic and hydrologic system-wide model. A summary of these activities is presented herein.

### **Process and Procedures**

Staff continue to review project and watershed based hydraulic and hydrologic models. Wade Trim has begun to review the Mill Creek model and develop more efficient ways to run Typical Year simulations for that model. CDM Smith has initiated the recalibration of the Muddy Creek watershed model, while Hazen and Sawyer has commenced work on the Mill Creek WWTP process model. Surveys were conducted on a number of CSO locations to determine weir heights following work completed at those sites by Wastewater Collections. The updated survey information will be incorporated into the SWM after the data have been reviewed.

### **Remote Monitoring**

August ended with 207 flow or level monitors in the ground to support various projects, operational needs, and flow verification for billing. The sites in the ground are divided between the various basins.

- Little Miami: 25 sites
- Mill Creek: 176 sites
- Muddy Creek: 1 site
- Polk Run: 5 sites (the LM-FE sites are in the Polk Run Basin)

Rainfall for the month of August averaged between 5-7 inches across the collection system. The largest events based on total rainfall occurred on August 28<sup>th</sup> resulting in approximately 5 inches.

Field work was completed for level monitor installation at Lick Run.

### **Consent Decree Projects**

MSD staff have been reviewing and working on a number of sub-basin model updates. During this reporting period activity was on-going in the following high priority basins for Phase 1 Consent Decree projects.

- Lower Mill Creek Watershed System-Wide Model
- Kings Run Model for CSOs 217/483
- West Fork Model for CSOs 125, 127, and 128
- Westwood Northern Bundle Model for CSOs 194, 195, and 525
- Ault Park Post-Construction Recalibration
- Development of a Phase 1 Mill Creek Model continued
- Various scenarios for the Wilder Avenue Sewer Project were modeled

It is anticipated that in late 2016 that all the LMC System Wide Model will be updated following additional flow monitoring. This work began in July with the NTP for the West Fork model recalibration.

**Treatment Plant Projects**

The Mill Creek WWTP process model scope of work was developed and finalized.

**Hydraulic Model Reviews for Capital Projects**

During the current reporting period work was active for the following capital projects in which models were reviewed:

- SSO 700 IWAP
- Stout Avenue model recalibration
- Development of flows to be used in the Mill Creek water quality model
- Development of a Phase 1 Little Miami model was completed
- Development of a Phase 1 Mill Creek model continued

**Upcoming Activities**

- Continue with coordination of ODOT projects, and SSO 700 IWAP.
- Continue working with Watershed Operations on Real Time Control project benefits.
- Continue working with Office of the Director on Phase 2 planning projects.

**Permit Applications**

MSD provides the County with review of draft Consent Decree Reports, Permit Applications and other official documents due to Government Agencies. For all WWIP projects, Permit to Install (PTI) applications are submitted to County Administration at least 15 business days in advance of planned submittal date. The following table lists the PTI notifications submitted to the County during this reporting period.

**Table 16 – PTI Notifications to the County During Reporting Period**

Project ID	Name
No notifications during this reporting period.	

**Table 17 – PTI Applications/Extensions Submitted to Ohio EPA During Reporting Period**

Project ID	Name
No notifications submitted during this reporting period.	

The following projects were issued PTIs Extension by Ohio EPA during this reporting period.

**Table 18 – PTIs Issued to MSD by Ohio EPA During Reporting Period**

Project ID	Name
No notifications issued during this reporting period.	

The following projects are currently forecasted to have PTI applications ready for submittal within the next 90 days. This list is subject to change depending on project dynamics.

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**Table 19 – PTI Applications Forecasted During Next 90 Days**

Project ID	Name	Month
10240450	Vinton Street – Beekman to Liddell Street Sewer Replacement	September 2016
10170100	SSO 1000 Elimination	September 2016
10240018	CSO 125 Stream Separation	October 2016
10143940	CSO 195 Westwood Northern Sewer Separation	October 2016
10170100	SSO 228 Elimination	October 2016
10143920	CSO 194 High Point Sewer Separation	October 2016
11240020	CSO 181 Real Time Control	October 2016
10320065	Reemelin Road Local Sewer (HNs 3489-3860)	October 2016
10320058	Kern Drive & Springdale Road Local Sewer	November 2016
11240130	Queen City Avenue Sewer separation Phase 2	November 2016
10170080	WWC Maintenance Shop Improvements	November 2016
11240110	Quebec Road Sewer Separation	November 2016

**90-Day Substantial Completion Forecast**

The Master Program Schedule forecasts the following projects achieving Consent Decree Substantial Completion for WWIP projects or operational ready/beneficial use for Asset Management projects.

**Table 20 – 90-Day Forecast for Substantial Completion**

Project ID	Name	Month	Status
10142020	Daly Road Sewer Replacement	September 2016	Under Construction
10240520	Freeman Ave- Klotter to McMicken Sewer Replacement	September 2016	Under Construction
10240685	DIW Roof Replacement	October 2016	Under Construction
10241825	SSO 700 Operational Improvements	October 2016	Under Construction
10440060	Pottinger Road Sewer Lateral Assessment (HN10444)	November 2016	
10210010	Indian Creek WWTP Reliability & Service Upgrades	November 2016	Under Construction
10270120	Catholic Calvary Cemetery Sewer Replacement	November 2016	Under Construction

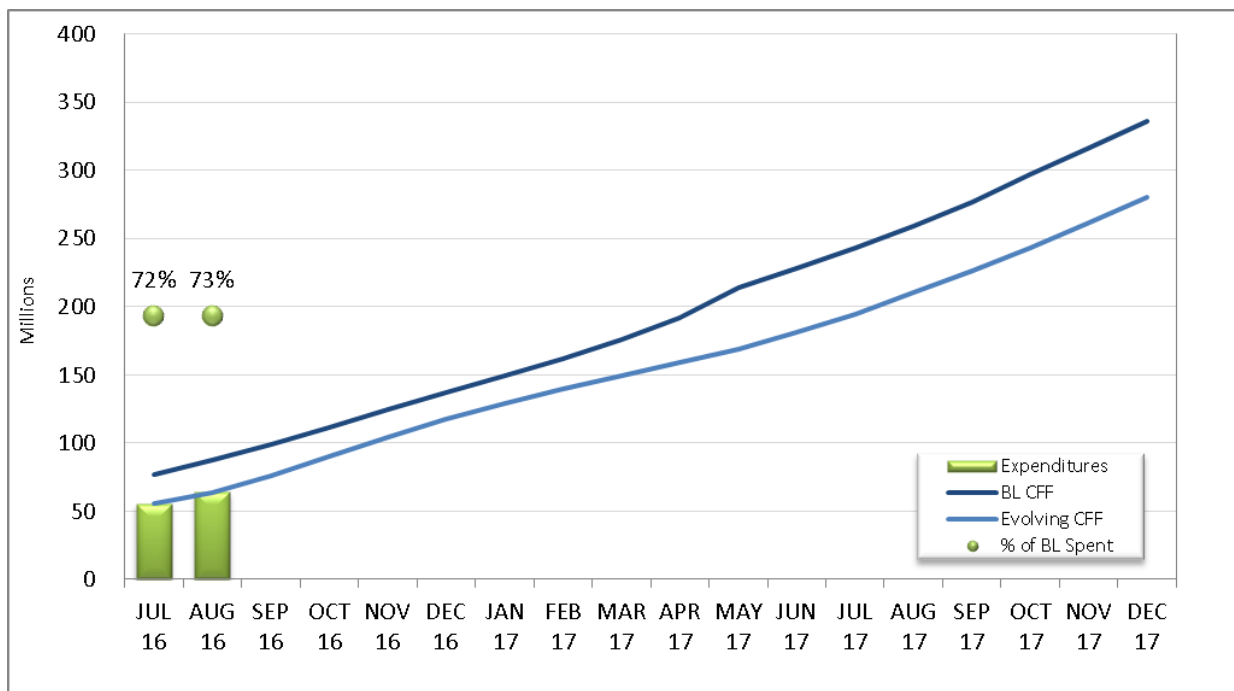
## CAPITAL PROGRAM FINANCIALS

Program financials are evaluated from multiple perspectives to assess monthly performance as compared to forecasted expenditures. On a monthly basis MSD reviews cash flow; budget and schedule variances; legislation and de-legislation activities; allowance expenditures; procurement activities; and the use of programmatic contingency.

### Cash Flow Forecast

In December 2015, the cash flow forecast was re-baselined along with the submitted annual 2016 Capital Improvement Plan (CIP). August 2016 month-end expenditures were 73% of the cash flow cumulative baseline as shown in the following figure. Details on the Evolving Cash Flow Forecast can be found in Appendix C.

Figure 6 – Capital Expenditures Compared to Cash Flow Forecast



The 73% cumulative variance (December 1, 2015 through August 31, 2016) includes a total of 301 projects and was approximately \$23M below projected spending. Details on the variance analysis can be found in Appendix K.

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**Table 21 – Overview of Cash Flow Variances**

Category	# of Projects	Variance
AM_ALLOCATIONS	29	\$4,226,228.47
AM_PROJECTS	139	(\$9,384,670.67)
HSTS_PROJECTS	44	(\$2,458,619.23)
SI_PROJECTS	37	(\$14,167,651.79)
UC_PROJECTS	3	(\$679,245.35)
WWIP_ALLOWANCE	18	\$3,074,228.64
WWIP_PROJECTS	30	(\$4,336,064.70)
OTHER	1	\$8,486.29
<b>Grand Total</b>	<b>301</b>	<b>(\$23,717,308.34)</b>

Projects that meet the variance criteria range of (+/-) 5% and (+/-) \$100,000 are shown below. Details on the variance analysis can be found in Appendix K.

**Table 22 – Summary of Monthly Cash Flow Variances (±5% or ±\$100,000)**

ID	Project Name	Variance
10130740	Werk & Westbourne EHRT Facility	(\$635,645.94)
10131180	Muddy Creek WWTP Dewatering Improvements	\$1,041,603.18
10140820	Colerain - Jessup Replacement Sewer	(\$343,289.81)
10141020	Colerain and Galbraith Storage Facility	(\$711,779.55)
10142020	Daly Road Sewer Replacement	(\$1,920,922.20)
10143220	CSO 179 Sewer Separation	(\$330,109.88)
10143920	CSO 194 High Point Sewer Separation	(\$493,681.24)
10144880	Mill Creek WWTP Preliminary and Primary Treatment Improvement	(\$314,672.00)
10170000	Upper Duck Creek Bundle	\$129,915.45
10170789	LMWWTP Planning Bundle	(\$110,263.36)
10171900	Eastern/Delta Sewer Separation Phase 3	(\$183,232.53)
10180100	Sewer Relining Trenchless Technology Program	\$274,430.83
10180116	Main Sewer Renewal Program 2016	(\$1,020,298.68)
10180215	Manhole Rehabilitation Trenchless Technology Program 2015	\$228,687.20
10180216	Manhole Renewal Program 2016	(\$164,246.75)
10180900	MSD Sustainable (Green) Infrastructure Program	\$137,030.46
10199015	Wet Weather Program Management and Support Services 2015	\$805,010.70
10199016	Wet Weather Program Management and Support Services 2016	\$695,084.35
10199115	Hamilton County Utility Oversight and Coordination 2015	\$2,044,553.91
10199116	Hamilton County Utility Oversight and Coordination 2016	(\$162,816.22)
10210010	Indian Creek WWTP Reliability and Service Upgrades	\$579,315.24
10220054	Bruestle Avenue Pump Station Elimination	(\$147,812.39)
10220061	Whitewater Township Regional Sewer District Phase III SR 128 Sewer Extension	(\$813,465.42)



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<b>ID</b>	<b>Project Name</b>	<b>Variance</b>
10230065	Muddy Creek WWTP Electrical Upgrades	(\$171,898.40)
10230090	Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kirkridge Acres P.S. Eliminations	(\$136,730.67)
10230135	Lower Muddy Creek Interceptor SSO Remediation	(\$282,397.31)
10240010	Dellway Avenue Sewer Replacement	(\$140,954.22)
10240012	Sharon Industrial Park PS Replacement	(\$200,448.11)
10240018	CSO 125 Stream Separation	(\$536,291.95)
10240021	CSO 217/483 Source Control - Phase C	(\$299,694.72)
10240052	MCWWTP Blower Energy Efficiency Upgrade	(\$966,895.54)
10240150	Mt Airy Forest Sewer Replacement	\$970,950.78
10240167	Fairmount Avenue Sewer Replacement	(\$188,916.89)
10240275	SSO 603 and 704 Improvements	(\$226,064.94)
10240291	Mill Creek WWTP Solids Handling Improvements Phase 1	(\$614,262.66)
10240340	Station Avenue Sewer Replacement	\$102,876.27
10240565	Overflow Parking lot for MSDGC Engineering and Administration Buildings	(\$474,405.58)(\$474,405.58)
10240575	MCWWTP Enhanced Incinerator Emission Controls	(\$671,384.94)
10240580	Quebec Heights Sewer Rehabilitation	(\$875,725.00)
10240581	Queen City and Cora Avenue Sewer Rehabilitation	(\$252,527.76)
10240590	Mill Creek WWTP Main Substation Improvements	(\$117,800.84)
10240635	Mill Creek WWTP Plant Influent and Headworks Odor Control	(\$115,933.01)(\$145,213.52)
10240700	Mill Creek WWTP Security Enhancements	(\$102,928.57)
10241325	Montana Ave Sewer - Ferncroft to Mustang Dr.	(\$253,514.39)
10241825	SSO 700 Operational Improvements	\$216,462.96
10270005	Dry Run Area Sewers Phase 2	(\$334,198.93)
10270110	Linwood Avenue Sewer Replacement	(\$155,818.16)
10270195	Little Miami WWTP Incineration Improvements	(\$334,221.82)
10280114	SCADA System Installs and Upgrades	(\$349,524.95)
10280124	CIP Project Planning	\$177,963.62
10280180	WWT System Asset Renewal	\$109,775.41
10280184	WWT System Asset Renewal 2014	\$347,949.47
10280185	WWT System Asset Renewal 2015	\$310,575.30
10280186	WWT System Asset Renewal 2016	(\$376,850.69)
10280235	Hydraulic Modeling 2015	\$104,370.41
10280236	Hydraulic Modeling 2016	(\$207,692.31)
10280315	Emergency Sewer Repairs 2015	(\$200,818.15)
10280316	Emergency Sewer Repairs 2016	\$3,857,150.33)
10280340	System-Wide Sensor Installation	(\$709,560.00)
10280515	High Risk Asset Renewal 2015	\$2,918,077.71
10280516	High Risk Asset Renewal 2016	\$1,939,592.56
10280606	Building Sewer Renewal Program 2016	(\$392,857.14)

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<b>ID</b>	<b>Project Name</b>	<b>Variance</b>
10280615	Water Quality Modeling 2015	\$261,797.66
10280700	Watershed Operational Data System	(\$343,750.00)
10280716	Critical Asset Management Projects 2016	(\$3,928,571.43)
10290145	Financial System Integration System	(\$141,923.08)
10320060	Mapleknoll Drive Local Sewer (HNs 9420-9562)	(\$138,647.70)
10320070	Crestnoll Lane Local Sewer (HN 3491-3609)	(\$146,935.84)
10330015	Werk Road Local Sewer (HN 5544-5686)	(\$465,398.74)
10370025	Kenwood Hills Local Sewer	(\$122,331.40)
10370032	Coldstream Drive & Asbury Road Local Sewer	(\$541,615.78)
10370045	Mt. Carmel/Vicbarb/Appleblossom Local Sewer	(\$413,641.04)
11140010	SSO 700 Integrated Watershed Action Plan	\$728,956.80
11142750	Brent Spence Bridge I-75 Reconstruction Coordination	(\$522,648.16)
11143260	CSO 21 I-75 Reconstruction Coordination	(\$276,934.71)
11170050	East Duck Creek IWAP	(\$347,142.86)
11240000	Lick Run Valley Conveyance System	\$963,700.98
11240001	Lick Run Property Demolitions	(\$2,831,804.07)
11240010	Sunset Ave, Sunset Lane and Rapid Run Pike Sewer Separation	(\$311,413.27)
11240030	Wyoming and Minion Avenues Sewer Separation	(\$125,438.74)
11240051	Harrison Avenue Sewer Separation Phase B	\$167,375.96
11240090	White Street Sewer Separation	(\$167,631.24)
11240110	Quebec Rd Sewer Separation	(\$237,408.70)
11240130	Queen City Ave Sewer Separation Phase 2	(\$223,121.20)
11240150	Queen City and Cora Avenues R/W Sewer Separation	(\$514,121.83)
11240170	Quebec Heights Sewer Separation	(\$765,898.31)
11240270	Queen City Ave Sewer Separation Phase 1	(\$416,570.58)
11242841	CSO 12 Sewer Separation Phase A.2	(\$6,380,249.77)
11242843	CSO 12 Sewer Separation Phase A.4a - I-75 to Colerain Ave	(\$506,942.41)
11242846	CSO 12 Sewer Separation Phase A.4b - Colerain to Spring Grove Avenue	(\$213,726.84)
11243140	CSO 217/483 Source Control Phase A	(\$644,853.96)
11243141	CSO 217/483 Source Control Phase B	(\$238,981.25)
11530000	Upper Muddy Creek Interceptor Replacement	(\$694,210.77)
12240350	Mill Creek Interceptor – Specific Basin Study	(\$803,536.45)

The County has indicated cash flow should be within 90 percent of the baseline forecast. The following factors are typically contributory to the actual expenditures being less than 90 percent of the baseline forecast.

- Projects approved in the CIP but on hold per the County monitor's direction
- Construction invoice coordination for Final Completion
- Allowance forecast reconciled with actual expenditures
- Legislation Delays from Baseline Schedule
- Project activity delays for any reason (right-of-way, County reviews, etc.)

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- Contracts awarded less than construction estimate (which is in the baseline cash flow)
- Projects spending sooner than forecasted
- Projects placed on-hold that were included in baseline forecast

A summary of the background for projects having major variances is provided in the following table.

Table 23 – Summary of Monthly Cash Flow Variances by Project Activity

Item	Number of Projects	% of Total Projects	Cash Flow vs Actual Variance	% Cash Flow Variance
Planning	21	16.98%	(\$988,370)	4.17%
Design	108	35.88%	(\$9,687,675)	40.85%
Bid and Award	13	4.32%	(\$2,530,222)	10.67%
Construction Legislation	8	2.66%	(\$800,541)	3.38%
Construction	28	9.30%	(\$11,498,567)	48.48%
Allowance	44	14.62%	\$7,285,131	-30.72%
Closeout	43	14.29%	(\$3,399,857)	14.33%
Closed	12	3.99%	(\$110,120)	0.46%
Future	12	3.99%	(\$1,055,069)	4.45%
Hold	9	2.99%	(\$919,200)	3.88%
Transferred	1	0.33%	(\$10,354)	0.04%
Dropped	2	0.66%	(\$2,464)	0.01%
<b>Grand Total</b>	<b>301</b>	<b>100.00%</b>	<b>(\$23,717,308)</b>	<b>100.00%</b>

### Budget Variance Report Overview

A summary of the 46 projects were showing budget variances in the reported month's variance report are listed below and detailed in Appendix B. These budget variances resulted in a net decrease of \$312,325,948.00 from the capital program budget.

- 14 projects had budget variances due to accounting adjustments
- 0 project had budget variances due to bidding coordination
- 0 projects had budget variances due to CIP coordination
- 0 projects had budget variances due to approved change order
- 0 project had budget variance due to Adaptive Management coordination with Regulators
- 10 projects had a budget variance due to a new project budget put into I-wave
- 0 projects had a budget variance due to right-of-acquisition
- 2 project had a budget variance due to scope changes
- 20 projects had a budget variance due to updated estimates

### Updated Cost Estimates

The following projects had a budget variance resulting from updated information including: 10141080 Ludlow and Lafayette Parallel Sewer (construction decreased; NOA-001 90% OPCC); 10240380 CSO 005 Water Connection (pre-construction services increased; PCR-001 in-house design); 10240435 Pleasant Run Central Force Main Repairs (right-of-way decreased; All ROW acquired); 10240455 Spring Grove Avenue Sewer Replacement and Rehabilitation (design increased; PC-0001-DESIGN); 10240475 Foraker Ave Sewer Replacement - Alms Pl to E. Terminus (right-of-way decreased; no ROW required); 10240590 Mill Creek WWTP Main Substation Improvements (miscellaneous expense increased; Loan origination fee-2017 CIP adjustment); 10240610 MCWWTP Primary Sludge Pumping Improvements (construction increased; 2017 CIP Adjustment); 10240675 Mill Creek WWTP Thickening Chemical Feed Improvements

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(construction increased; 2017 CIP Adjustment); 10170811 LMWWTP Solids Handling Improvements (construction increased; Phase 2 Project - moved out to accommodate 10270195 pending result of the Solids Handling discussions for the district.); 10171540 CSO 135 Elimination (design increased; Phase 2 project); 10171560 CSO 43 Elimination (construction increased; future project); 10171641 CSO 214 Partial Separation (construction increased; phase 2 project); 10171761 CSO 552 Stormwater Removal (construction increased; phase 2 project); 11170050 East Duck Creek IWAP (planning increased; phase 2 project); 10199019 Wet Weather Program Management and Support Services 2019 (pre-construction services decreased; Phase 2 coordination); 10199020 Wet Weather Program Management and Support Services 2020 (pre-construction services decreased; Phase 2 coordination); 10199021 Wet Weather Program Management and Support Services 2021 (pre-construction services decreased; Phase 2 coordination); 10280237 Hydraulic Modeling 2017 (planning decreased; Phase 2 coordination); 10280510 Centralized Grit Handling & Processing Facility (construction increased; Phase 2 coordination); 10230041 Westport Village PS Elimination (construction services increased; Updated based on new midpoint of construction).

### Accounting Adjustments

The following projects were adjusted to allocate costs; reconcile EAC with actuals for completed line-items; reflect de-legislations; properly reflect in-house labor for design work. 10143920 CSO 194 High Point Sewer Separation (miscellaneous expense decreased; phase schedule accidentally closed, should be adjusted back next month); 10240012 Sharon Industrial Park PS Replacement (design increased; Cost hit wrong activity); 10240150 Mt Airy Forest Sewer Replacement (right-of-way increased; Actuals hit ROW for Title updates); 10240405 Ponderosa Woods Pump Station Elimination (miscellaneous expense decreased; NLLIT 8/26/2016); 10240540 Spring Grove Av, Township St. Sewer Improvements (construction decreased; Budget to be \$394,676); 10241825 SSO 700 Operational Improvements (design increased; Cost hit wrong activity); 11240001 Lick Run Property Demolitions (miscellaneous expense decreased; Schedule window closed); 11240010 Sunset Ave, Sunset Lane and Rapid Run Pike Sewer Separation (pre-construction services decreased; Schedule window closed); 11240270 Queen City Ave Sewer Separation Phase 1 (interest decreased; Interest removed EAC set to equal actuals); 10270125 Portsmouth Avenue Sewer Replacement (construction decreased; 10270125-NOA-0003 project looking to be added to 10180116); 10130400 River Rd. Near Muddy Creek WWTP Conveyance Sewer (construction services decreased; Phase 2 coordination); 10230031 CSO 404,405,410,411 Outfall Reconstruction (right-of-way decreased; ROW complete EAC set to equal actuals); 10230032 CSO 405 Outfall Reconstruction (right-of-way decreased; ROW complete EAC set to equal actuals); 10230033 CSO 410 Outfall Reconstruction (right-of-way decreased; ROW complete EAC set to equal actuals).

### New Projects

The following projects were added:

10141160 Reading Rd & Losantiville Rd (design increased; 2017 CIP Adjustment); 10142640 Vine St Div Dam (construction increased; 2017 CIP Adjustment); 10142720 64th Street Div Dam (construction increased; 2017 CIP Adjustment); 10142980 Clifton Ave West Grating (construction increased; 2017 CIP Adjustment); 10145540 WWTP Joint MSD/Butler County Facility (design increased; Phase 2 Adjustment); 10171261 CSO 61 Partial Separation (construction increased; future project); 10171521 CSO 503 Partial Separation (construction increased; future project); 10130002 Muddy Creek Conveyance Improvements (construction increased; Phase 2 coordination); 10130161 Muddy creek PSU & Force Main (construction increased; Phase 2 coordination); 10131021 CSO 402-406 Wet Weather Improvements (construction increased; Phase 2 coordination).

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### WWIP Program 2006\$

The projects listed in Attachment 1B of the Final Wet Weather Plan are currently trending at \$1.10 billion in 2006 dollars as compared to the \$1.14 billion estimated cost of the Phase 1 program.

### **Schedule Variance Report Overview**

A summary of projects with more than 30 days of schedule variance are listed in Appendix B. A total of 77 projects had schedule variances. A summary of the schedule variances are provided herein.

- 0 projects had schedule variances associated with approved change order time extensions
- 4 project had a schedule variance associated with construction procurement
- 8 projects had schedule variances associated with coordination with the County
- 4 projects had schedule variances associated with design procurement
- 1 projects had schedule variances associated with new projects entered into I-wave
- 13 projects had schedule variances due to CIP coordination & prioritization
- 36 projects had schedule variances associated with project coordination
- 4 projects had schedule variances associated with right-of-way acquisitions
- 0 projects had a schedule variance associated with a scope change
- 11 projects had schedule variances associated with updated activity durations
- 0 projects had schedule variances associated with master service agreements (MSAs)
- 0 projects had schedule variances due to bidding coordination

### Updated Duration

The following projects experienced schedule variances due to updated durations including: 10143920 CSO 194 High Point Sewer Separation (Construction duration was reduced based on 100% drawings); 10240018 CSO 125 Stream Separation (Awaiting 90% Drawings); 10240180 3934 Winding Way Sewer Replacement (Awaiting 90% Drawings); 10240330 Otte Avenue Sewer Replacement (Awaiting 60% Drawings); 10240380 CSO 005 Water Connection (Awaiting 90% Drawings); 10240450 Vinton Street - Beekman to Liddell Street Sewer Replacement (Awaiting PTI); 10240455 Spring Grove Avenue Sewer Replacement and Rehabilitation (Awaiting 90% Drawings); 10240526 Cypress St - Ashland Av to 250 feet east Sewer Replacement (Awaiting LAR submittal); 10171580 CSO 54 Improvements (designer working with MSD to settle legal issues for easement drawings); 10270185 Paxton Ave at Linwood Ave Sewer Replacement (Project moved out dealing with design issues); 10280510 Centralized Grit Handling & Processing Facility (Phase 2 coordination).

### County Coordination

The following projects experienced schedule variances due to on-going coordination with the County team: 10143220 CSO 179 Sewer Separation (Line item transfer was approved in August, so now we can advertise); 10240540 Spring Grove Av, Township St. Sewer Improvements (Awaiting Construction Legislation); 10240565 Overflow Parking lot for MSDGC Engineering and Administration Buildings (Awaiting Construction Legislation); 10170811 LMWWTP Solids Handling Improvements (Phase 2 Project - moved out to accommodate 10270195 pending result of the Solids Handling discussions for the district.); 10230031 CSO 404,405,410,411 Outfall Reconstruction (Const Leg pushed into September); 10230032 CSO 405 Outfall Reconstruction (Const Leg pushed into September); 10230033 CSO 410 Outfall



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Reconstruction (Const Leg pushed into September); 10230034 CSO 411 Outfall Reconstruction (Const Leg pushed into September).

### Project Coordination

The following projects experienced schedule variances due to on-going coordination:

11240110 Quebec Rd Sewer Separation (Schedule correction for award process duration); 11240150 Queen City and Cora Avenues R/W Sewer Separation (Coordination with Duke prior to bidding); 11240170 Quebec Heights Sewer Separation (Coordination with Duke prior to bidding); 10170812 Little Miami WWTP Electrical and Disinfection Improvements (Move project into the 2018 CIP); 10171040 CSO 69 Improvements (Phase 2 Project); 10171080 CSO 71 Improvements (Phase 2 Project); 10171100 CSO 72 Improvements (Phase 2 Project); 10171120 CSO 74 Improvements (Phase 2 Project); 10171640 CSO 214 Storage Facility (phase 2 project); 11170050 East Duck Creek IWAP (phase 2 project); 12270025 Harris Avenue Sewer Replacement (Phase 2 Project); 12270065 Madison and Zumstein Sewer Replacement (Phase 2 Project); 12270075 5053 Ridge Ave Sewer Replacement (Phase 2 Project); 12270105 Delta Interceptor Grit Pit (Phase 2 Project); 10130000 Muddy Creek Basin Storage and Conveyance Sewer (Phase 2 coordination); 10130002 Muddy Creek Conveyance Improvements (Phase 2 coordination); 10130010 Hillside Avenue Extraneous Stormwater Removal (Phase 2 coordination); 10130015 Muddy Creek WWTP EHRT (Phase 2 coordination); 10130020 Muddy Creek Interceptor Rehabilitation (Phase 2 coordination); 10130160 Muddy Creek Pump Station Upgrade (Phase 2 coordination); 10130161 Muddy creek PSU & Force Main (Phase 2 coordination); 10130280 Addyston Pump Station Elimination (Phase 2 coordination); 10130400 River Rd. Near Muddy Creek WWTP Conveyance Sewer (Phase 2 coordination); 10130720 CSO 518 Regulator Improvements (Phase 2 coordination); 10130761 Rapid Run & Devils Backbone (Phase 2 coordination); 10131021 CSO 402-406 Wet Weather Improvements (Phase 2 coordination); 10131120 West Branch Muddy Creek Interceptor (Phase 2 coordination); 10230140 Addyston Extraneous Stormwater Removal (Phase 2 coordination); 10320058 Kern Drive & Springdale Road Local Sewer (New Project manager on Locals and Laterals prioritizing projects); 10320065 Reemelin Road Local Sewer (HNs 3489-3860) (New Project manager on Locals and Laterals prioritizing projects); 10320080 Russell Heights Drive Local Sewer (New Project manager on Locals and Laterals prioritizing projects); 10320085 Brierly Creek Road Local Sewer (HNs 6040-6100) (New Project manager on Locals and Laterals prioritizing projects); 10330015 Werk Road Local Sewer (HN 5544-5686) (New Project manager on Locals and Laterals prioritizing projects); 10420015 Boomer Road Sewer Lateral Assessment (New Project manager on Locals and Laterals prioritizing projects); 10420035 Jessup Road Sewer Lateral Assessment (HN 5950) (New Project manager on Locals and Laterals prioritizing projects); 11230030 CSO 402-406 Sustainable Infrastructure Opportunities (Phase 2 coordination).

### Schedule Recovery Plans

There was no primary driver for the monthly schedule variances on active projects. The projects with schedule variances attributed to County coordination were due to on-going discussions with the Consent Decree Regulators or County legislation requests.

Project-specific schedule recovery plans are not warranted at this time. However, Appendix K includes an expanded version of Table 15 that reflects forecasted spending on the projects listed.

## **Allowance Expenditures**

A summary of allowance expenditures during the current reporting period is presented in the following table. MSD has provided a detailed allowance expenditures report in Appendix D. It is important to note that since this report is based on costs incurred, it reflects invoices paid in the month, not work invoiced or work performed. Additionally, only those allowances and task orders with costs in the month will be included. Work is considered complete when the work is done, not when the last invoice has been paid. Therefore, future invoices may come through on future monthly reports.



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**Table 24 – Summary of Allowance Spending**

<b>Allowance</b>	<b>ID</b>	<b>August 2016 Expenditures</b>	<b>2016 Expenditures through August 31, 2016</b>
<b>CIP Planning</b>			
	10280124	\$131,073.20	\$852,983.18
<b>Emergency Sewers</b>			
	10280315		\$11,957.78
	10280316	\$1,923,679.93	\$6,145,611.87
<b>Flow &amp; Water Quality Modeling</b>			
	10280420		\$9,869.67
	10280440		\$5,456.05
<b>High Risk Asset Renewal</b>			
	10280515		\$1,163,749.47
	10280516	\$5,392.63	\$2,920,361.79
<b>Home Sewer Treatment Systems</b>			
	10190315		\$30,457.78
	10190316	\$19,011.29	\$98,717.13
<b>Program Management</b>			
	10199000		\$50,976.00
	10199015	\$264.30	\$474,612.22
	10199016	\$225,354.76	\$1,915,084.35
	10199116	\$737,183.78	\$737,183.78
<b>Sustainable Infrastructure</b>			
	10180900	\$988.66	\$130,530.46
<b>Trenchless Technology - Manhole</b>			
	10180215		\$182,449.49
	10180216		\$155,753.25
<b>Trenchless Technology - Sewer</b>			
	10180100		\$12,085.78
	10180115		\$26,483.09
	10180116	\$21,173.00	\$471,367.99
<b>WWT System Asset Renewal</b>			
	10280180		\$98,560.97
	10280184		\$333,545.47
	10280185		\$180,547.30
	10280186	\$54,298.40	\$276,995.46
<b>WATER_QUALITY</b>			
	10280615		\$237,264.64
<b>HYDRAULIC_MODEL</b>			
	10280235		\$80,477.25
<b>Grand Total</b>		<b>\$1,648,521.58</b>	<b>\$16,603,082.22</b>

## Legislation Activities

MSD held a legislative dry run meeting on July 6<sup>th</sup> to work with the County monitor team to process three legislative items during July 2016. Appropriation legislated during this month for specific projects totaled \$5,544,400 for this reporting period. A summary of the legislation activities is presented in the following tables.

**Table 25 – Summary of Approved Legislation Activities for Reporting Period**

ID	Project/Item	Activity	Appropriation
11240110	Quebec Road Sewer Separation	LIT/Rules	\$0
10240337	Bogart Avenue Sewer Separation	Construction	\$200,700
10240435	Pleasant Run Central Force Main Repairs	Construction	\$1,223,500
10240380	CSO 005 Water Connection	LIT/Rules	\$0
<b>Total Monthly Appropriation Approved for August 2016</b>			<b>\$1,424,200</b>

**Table 26 – Summary of Held Legislation Activities for Wastewater Treatment Allowance**

Project ID	Project Name	Legislation Request Type	MSD Submitted Date	Funds Requested
11530001	Upper Muddy Creek Interceptor Contract A	Construction	9/24/2015	\$1,053,500.00
10270195	Little Miami WWTP Incineration Improvements	Resolution to undertake project design based upon Feasibility Analysis	2/2/2016	\$0.00
10240275	SSO 603/704 Improvements	Construction	11/12/2015	\$1,729,900.00
10240291	Mill Creek WWTP Solids Handling Phase 1	Construction	4/19/2016	\$18,888,300.00
10240480	Mill Creek WWTP Dewatering Polymer System Replacement	Construction	4/19/2016	\$6,602,900.00
11040010	Rapid Run Park Source Control	Add'l Construction	4/19/2016	\$195,700.00
11040190	West Fork Riparian and Floodplain Restoration	Construction	6/8/2016	\$295,300.00

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Project ID	Project Name	Legislation Request Type	MSD Submitted Date	Funds Requested
10280114	SCADA Installs and Upgrades	Line Item Transfer	6/8/2016; rev. 7/18/16	\$0.00
10240665	Mill Creek WWTP Septage Receiving Station Odor Control Improvements	Design	6/8/2016	\$178,800.00
10143220	CSO 179 Sewer Separation	Line Item Transfer	6/21/2016; rev. 7/18/16; rev. 8/25/16	\$0.00
10280800	Asset Management System Implementation	Planning	6/24/2016	\$1,032,746.00
10230031	CSO 404, 405, 410, 411 Outfall Reconstruction	Construction	6/29/2016	\$762,100.00

The January 15, 2014 BoCC Resolution adopting the revised FY 2014- 2018 Capital Improvement Program stated in item 5 that if “MSD proposes a new project to be added to the 2014-2018 MSD CIP, MSD shall identify a project (or multiple projects) currently in the CIP that will be cancelled or delayed until the 2015 program or later to offset the additional cost of the proposed project”. MSD tracks and reports this information during the legislation request for new funds. An overview of 2016 CIP offsetting projects is provided in Appendix I.

### **De-Legislation Activities**

De-legislation didn't occur during the current reporting period. MSD received comments from the County in late June regarding de-legislation. These comments are presently under review.

### **Procurement Activities**

The County has requested a monthly report out on several procurement related activities. This information is provided herein.

### **Memoranda of Understanding (MOUs)**

A preliminary inventory of existing MOUs for MSD projects is provided on MSD's SharePoint site <http://mymsd1/docs/CIP/Contracts/MOU>. This information will continue to be refined. A listing of pending or potential MOUs is provided in the following table.

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Table 27 – List of Executed & Pending MOUs

EXECUTED MOUs								
ID	Project Name	Project Manager	MOU Contract # or other identifying information	MOU Parties	Services Provided	Total Cost	Execution Date	Expiration Date
None executed during reporting month.								

PENDING MOUs			
ID	Project Name	MOU Parties	Services Provided
10141080	Ludlow & Lafayette Parallel Sewer	Cincinnati Parks & MSDGC	MOU Granting permanent and temporary easement for construction.  Underground sewer. No surface features. No change in maintenance requirements.
10171900	Eastern & Delta Ph. 3	Cincinnati Recreation Commission & MSDGC	1. Plat Cut up for Recreation Property. 2. MSD to have easement on one of the Cut up Parcels
10240018	CSO 125 Stream Separation	Cincinnati Parks & MSDGC	1. MSD will own and maintain an asset on City property. 2. MOU will grant easements and detail level of service.
10240021	CSO 217/483 Source Control Phase C	Cincinnati Department of Transportation and Engineering & MSDGC	1. MSD will own and maintain an asset on City property. 2. MOU will detail level of service.

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<b>PENDING MOUs</b>			
<b>ID</b>	<b>Project Name</b>	<b>MOU Parties</b>	<b>Services Provided</b>
10240142	Macauley Street Sewer Replacement	Cincinnati Recreation Commission & MSDGC	The request was for funds to complete additional work not anticipated by CRC and additional restoration work left undone by MSD's contractor. CRC's contractor installed additional asphalt, concrete sidewalk, repaired erosion problems, reinstalled both backboards and other miscellaneous work.
10240350	McKeone Avenue Sewer Replacement	Cincinnati Parks & MSDGC	Grant of temporary and permanent easement for sewer across.
10240430	Berkley Ave Sewer Replacement	Cincinnati Recreation Commission & MSDGC	Need ROE or temporary easement to be granted.
11040010	Rapid Run Park Source Control	Cincinnati Parks & MSDGC	MSD will own and maintain an asset on City property. Maintenance including plant replacements, pruning, sediment removal, weeding, trash removal, watering, and spraying.
11142741	CSO 488 and 490 I-75 Reconstruction Coordination	ODOT & MSDGC	Design and construction of two storm crossings as part of ODOT project
11143260	CSO 21 I-75 Reconstruction Coordination	Cincinnati Public Services Department and MSDGC	MSD will own and maintain an asset on City property. A storm sewer easement and a sanitary easement needed on City property.
		ODOT & MSDGC	Construction of sewer pipe, ODOT use of MSD outfall with shared cost, shared use of access drive with shared cost, and permission to locate CSO in ROW (cab)

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PENDING MOUs			
ID	Project Name	MOU Parties	Services Provided
11240000	Lick Run Valley Conveyance System	Cincinnati Department of Transportation and Engineering & MSDGC	Amendment to MOU 00150286-3 with DOTE to provide gateway signage design services.
		Cincinnati Parks & MSDGC	1. Easement for MSD, ownership identification. 2. maintenance responsibilities
		Cincinnati Recreation Commission & MSDGC	Easement for CRC, maintenance responsibilities, ownership identification, and park improvement identification
		Enterprise Technology Solutions, DOTE, DPS & MSDGC	ETS: Fiber re-establishment scope and costs DPS: 1. Property Management transfer/easement 2. Existing building cost, 3. Relocation scope and costs
		Cincinnati Fire Department & MSDGC	Temporary operational changes during construction
		Cincinnati Department of Transportation and Engineering, DPS, & MSDGC	1. Property management transfer/easement 2. ownership identification. 3. maintenance responsibilities

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PENDING MOUs			
ID	Project Name	MOU Parties	Services Provided
		Greater Cincinnati Water Works & MSDGC	<p>GCWW Construction Contact 1, Phase 1 &amp; 4.</p> <ol style="list-style-type: none"> <li>1. Watermain relocation.</li> <li>2. Costs - GCWW Estimated</li> <li>3. Schedule - 8 or 9 mon. Const. period. 10/16 to 6/17.</li> </ol> <p>VCS Construction Contract</p> <ol style="list-style-type: none"> <li>1. Watermain relocation.</li> <li>2. Costs - MSD Estimated Costs</li> <li>3. Schedule - With VCS</li> </ol> <p>GCWW Construction Contact 2, Beekman to Millcreek.</p> <ol style="list-style-type: none"> <li>1. Watermain relocation.</li> <li>2. Costs - GCWW Estimated</li> <li>3. Schedule - Schedule can vary.</li> </ol> <p>GCWW Construction Contact 3, Beekman to White Street.</p> <ol style="list-style-type: none"> <li>1. Watermain relocation.</li> <li>2. Costs - GCWW Estimated Costs</li> <li>3. Schedule - 12 mon. Const. period. 5/17 to 5/18.</li> </ol>
11240150	Queen City and Cora Avenues R/W Sewer Separation	Cincinnati Department of Transportation and Engineering & MSDGC	MSD will own and maintain an asset on City property (a paper street). MOU will detail level of service.
11240170	Quebec Heights Sewer Separation	Cincinnati Parks & MSDGC	<ol style="list-style-type: none"> <li>1. MSD will own and maintain the asset installed on Parks' property.</li> <li>2. Outline the level of effort expected of MSD by Parks.</li> </ol>

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<b>PENDING MOUs</b>			
<b>ID</b>	<b>Project Name</b>	<b>MOU Parties</b>	<b>Services Provided</b>
		Cincinnati Department of Transportation and Engineering & MSDGC	MSD will own and maintain an asset on City property. MOU will detail level of service.
11243142	CSO 217/483 Source Control Phase A2	Cincinnati Recreation Commission & MSDGC	<ol style="list-style-type: none"> <li>1. MSD will own and maintain an asset on City property.</li> <li>2. MOU will detail level of service.</li> </ol>
11530000	Upper Muddy Creek Interceptor	Cincinnati Recreation Commission & MSDGC	Grant of temporary and permanent easement for sewer across driveway.
	Cooperative Maintenance & Upgrade of Public Infrastructure during City Street Rehab Projects	Cincinnati Department of Transportation and Engineering & MSDGC	<ol style="list-style-type: none"> <li>1. Joint commitment to cooperate on rehab projects</li> <li>2. Identify responsibilities for inspection, adjustment and repair of MSD facilities within the limits of City Street Rehab Projects</li> <li>3. Details responsibilities and procedures for estimating, funding, procuring, accepting and paying for contract work items that are the responsibility of MSD.</li> </ol>



### Contract Management

MSD's Procurement Division issues work orders for professional consulting services, procures professional agreements, and facilitates bidding of construction projects and award of construction contracts.

Table 28 – Summary of Contracting Activities

Contract No.	Vendor	Contract Type; Amendment No./ Reason	Contract Value	Project No./Name/Type of Services (MA)
65x12248	Burgess & Niple, Inc.	PSA	\$155,000.00	Engineering Design Services for the Mill Creek WWTP Influent and Headworks Odor Control Project
65x12249	Environmental Technologies & Communications, Inc. (ETC)	PSA	\$125,987.00	Staff Supplementation Services for the Document Control Specialist Position
65x12250	Brown and Caldwell	PSA	\$246,131.00	Professional Consulting Services for the Odor Control Dispersion Model
65x12242	Paul Rowlett Contractors, Inc.	Construction	\$27,625.00	Pottinger Road Sewer Lateral Assessment (HN 10444) - 10440060
65x12246	Howel Contractor's Inc.	Construction	\$1,634,730.00	Montana Avenue Sewer Replacement - 10241325

Table 29 – Summary of RFQ/Ps

RFQ/P #	RFQ/P Title	Publish Date	Due Date	Proposed contract term	Estimated total value of potential contract
RFP 2016-011	Continuous Distributed Rainfall Record	August 11, 2016	August 31, 2016	2 years with 2 one year optional renewal periods	\$45,000 Total

### Bidding Activities

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During July 2016, MSD had advertised opened public bids, and/or awarded contracts. A summary of activities is provided in Appendix E.

**Table 30 – Summary of Bidding Activities During Reporting Period**

ID	Project	Activity
10241325	Montana Avenue Sewer Replacement	Advertised/Bid Opened

### Small Business Enterprise (SBE)

The MSDGC SBE Program recognizes that small businesses are a vital part of the tax base and an essential source of jobs in the local economy. Therefore, the MSDGC SBE Program is structured for targeted outreach, business advocacy, technical assistance and relationship building for the purpose of retaining and growing our registered small businesses.

The following is a synopsis of the Program activities during August 2016.

#### Pre Bid/RFP/RFQ Analysis

- Wyoming and Minion Avenues (2)
- Airport and Rob Sewer Replacement
- Lick Run Property Demolition Phases E and F
- 2016 Road Restoration WWT & WWC

#### Post Bid/RFP/RFQ Analysis

- Montana Avenue Sewer Replacement
- Main Sewer Renewal Program 2016
- Contract Document Control Specialist

#### Pre Bid Meetings

No pre-bid meetings were held during the reporting period.

#### Preconstruction Meetings

- Werk & Westbourne EHRT Facility
- Main Sewer Renewal Program 2016

#### Site Visits

There are 20 confirmed ongoing construction projects. Staff completed 11 (55%) site visits for the month.

- Catholic Calvary Cemetery Sewer Lining – Staff made two visits. First visit on 8/1/2016 no workers on site. Owner Rep was on site. Second visit on 8/2/16 SBE sub, Rack and Ballauer, was on site performing work as indicated in contract. SBE subcontract work scheduled to be completed on 8/3/2016. No follow-up recommended.
- Mt. Airy Forest Sewer Replacement (WPCLF) – Staff unable to locate site on 8/2/2016 visit. Second visit on 8/3/2016 staff talked with prime and MSD rep. DBE/W/M subs were not present. Prime provided the name of the M/DBE pipe supplier, which is the same as listed in

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the bid document. MSD Staff will contact sub to get confirmation on delivery of materials and costs. The W/DBE sub performing landscaping will begin near project end 2017-2018; follow-up in late 2017.

- Bahama Gardens Force Main Replacement – Work scheduled to begin in July and end December. No workers on site during the 8/2 and 8/3/2016 visits. During 8/18/16 visit, no SBE subs on site. SBE scheduled to begin approximately 9/1/2016. Process to complete this job was changed and prime is not using initial sub for same amount of work. Non SBE subs are on job; therefore, a request for GFE documentation was requested.
- Werk/Westbourne EHRT Facility (WPCLF) - DBE sub on site and performing work as indicated in bid. Follow-up when next scheduled DBE sub to work. Date TBD.
- White Street Sewer Separation – Staff did two site visits. M/WBE supplier was not on site. Interviewed prime foreman who provided the name of the material supplier, the same as listed in the bid document.
- Indian Creek - M/WBE was not on site. Interviewer was shown work of WBE have completed thus far. SBE staff will be contacted when sub is scheduled to do additional work.

### Upcoming Project Notification

Notices were sent to 67 MSDGC registered firms regarding the following upcoming projects:

- 2016 Road Restoration WWT and WWC
- Airport and Robb Sewer Replacement Millbrook #2 Pump Station Replacement Poole Road Sewer Lateral Assessment
- Queen City Avenue Sewer Separation
- Wyoming and Minion Avenues Sewer Separation

### Outreach

- MSD New Employee Orientation - MSD staff presented an overview of the SBE Program during MSD New Employee Orientation on August 25<sup>th</sup>. The purpose of presenting an overview of the program to new employees is to make them aware that Hamilton County and the City of Cincinnati are committed to growing Small Business Enterprises and have dedicated resources to doing so. The presentation included information on the roles and responsibilities of the SBE Program and how all staff can play a part in supporting MSD's inclusion efforts. Sixteen (16) new employees were in attendance.
- The Exchange: A Conversation with Harry Black - Also on the 25<sup>th</sup>, MSD staff attended the Greater Cincinnati Northern Kentucky African American Chamber of Commerce's monthly networking event, The Exchange. This month's guest speaker was City Manager Harry Black. City Manager Black spoke about a variety of topics including the City's economic inclusion efforts and fielded questions from the audience. SBE staff was able to network with forty (40) small- and minority-owned businesses that were in attendance.

**Workshop / Seminars / Trainings**

- 
- Joint DEI and Purchasing Training – On August 5<sup>th</sup>, SBE staff attended the final session in a series of joint Department of Economic Inclusion and Purchasing trainings facilitated by Chief Procurement Officer Patrick Duhaney.
- Certified Sustainability Professional Workshop – On August 9<sup>th</sup>, the SBE SMA attended the Certified Sustainability Professional Workshop. The workshop was designed to train individuals on how to assist small neighborhood businesses in improving their sustainability performance. As follow-up to the training, the SBE SMA will become a Certified Sustainability Professional and identify ten (10) companies to receive a free sustainability assessment leading to their transition to sustainable operations and SEMS certification.
- GIS/Poseidon Training – Additional SBE staff attended GIS/Poseidon Training on August 17<sup>th</sup>. The training instructed staff on how to search for information on MSD projects using the software.

**Table 31 – SBE Registrations & Renewals**

New Registrations	Renewals	Research	Active MSD SBEs
0	5	18	179

**Change Management**

MSD documents changes to projects via two primary processes: the change order process and the notice of advisement process.

***Notice of Advisements (NOAs)***

During August, the following Notice of Advisements (NOA) were issued.

**Table 32 – Notice of Advisements Issued During Reporting Period**

NOA ID	Name	Budget Impact	Purpose of Advisement	Status	Status Date
10241820-NOA-0001	10241820 – SSO 700 Facility Improvements	(\$651,900.00)	Updated cost estimate	Approved	08/25/16
10230090-NOA-0004	10230090 – Barrington Hills Pump Station Elimination	\$135,000.00	Revised scope fee for the calibration and validation of the	Approved	08/25/16

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NOA ID	Name	Budget Impact	Purpose of Advisement	Status	Status Date
			model		
10270170-NOA-0001	10270170 – CSO 83 and 472 Dynamic Underflow Control	\$196,000.00	NOA provide design and Right of Way cost to be added to the 2017 CIP	Approved	08/16/16
10240540-NOA-002	10240540 – Spring Grove at Township Sewer Replacement	(\$257,300.00)	This NOA updates the construction cost and schedule for Spring Grove Ave.	Approved	08/09/16
10240645-NOA-0001	10240645 – WWC – Maintenance Shop Improvements	\$574,611.00	Construction Estimate 60% Design (OPCC)	Approved w/ Exception(s)	08/09/16
10470009-NOA-0001	10470009 – Markley Road Sewer Lateral Assessment (HN 1019)	\$72,000.00	Project has been adjusted to run 8” sewer in lieu of 6”	Approved	08/03/16
10420020-NOA-0001	10420010 – West Fork Road Sewer Lateral Assessment (HN 5481)	\$29,200.00	Project has been adjusted to run 8” sewer in lieu of 6”	Approved	08/03/16
10420030-NOA-0001	10420030 – Blue Rock Road Sewer Lateral Assessment (HN 4300)	\$75,000.00	Project has been adjusted to run 8” sewer in lieu of 6”	Approved	08/03/16
10230125-NOA-0001	10230120 – CSO 522 Conveyance Sewer	\$645,000.00	Budget needs updated for 2017 CIP	Approved	08/02/16

**Change Orders Executed**

During August, the following Change Orders were executed:

**Table 33 – Summary of Change Orders Executed During Reporting Period**

CO	ID	Name	Budget Impact	Schedule Impact (Days)	Purpose for Change	Date Approved
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CO	ID	Name	Budget Impact	Schedule Impact (Days)	Purpose for Change	Date Approved
55X12153-CCO-001	10131180	Muddy Creek WWTP AD New Belt Filter Press	\$36,185.00	0	Sludge Pump Design Change, Block change to CMU, Additional Pavement, Drain Cleaning, Larger CMU, Pavement Modifications, Suction Pipe Size	8/17/16
45X11960-CCO-003	10240340	Station Avenue Sewer Replacement	(\$1,283.11)	0	Credit for Labor Burden over charges in Change Order No. 1 by Subcontractor	8/19/16
55X12012-CCO-001	11240010	Sunset Avenue, Sunset Lane and Rapid Run Pike Sewer Separation	\$36,912.76	0	Tie-in to existing sanitary sewer, trench excavation along 24" water main and alternate risers for the water quality units	8/24/16

**Programmatic Contingency**

A Programmatic Contingency log can be found on MSD's SharePoint site

<http://mymisd1/workspaces/it/DCI/Program%20Contingencies%20Log/Forms/AllItems.aspx>.

**Table 34 – Summary of Programmatic Contingency Fund Utilization**

PC#	ID	Name	Requested Amount	Purpose for Change
0001	10141080	Ludlow and Lafayette Parallel Sewer	\$10,000.00	ROW was not legislated with the project. It was originally thought to be within the public right of way. However, due to design and upsizing of the sewer pipe ROW appropriations for easements will be necessary.

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<b>PC#</b>	<b>ID</b>	<b>Name</b>	<b>Requested Amount</b>	<b>Purpose for Change</b>
0004	10142020	Daly Road Sewer Replacement	\$3,486.00	See 10142020 45X11818-CCO-001 for additional information.
0002	10143920	CSO 1940High Point Sewer Separation	\$22,000.00	Pre-construction funds have been exhausted due to the length of time design has been on hold.
0002	11243141	CSO 217/483 Source Control Phase B	\$415,500.00	11243141-PC-0002 had legislative action taken on it on June 29, 2016 after the project funding was approved in the 2016 CIP.
<b>August Total (4)</b>			<b>\$450,986.00</b>	
July Total (1)			\$180,000.00	
June Total (2)			\$238,400.00	
May Total (16)			\$1,254,793.15	
April Total (10)			\$121,317.59	
March Total (6)			\$207,905.81	
February Total (10)			\$354,064.99	
January Total (2)			\$26,506.00	
<b>2016 Approved (51)</b>			<b>\$2,833,973.54</b>	

## LOWER MILL CREEK PARTIAL REMEDY PROGRAM

### Valley Conveyance System

The Lick Run Valley Conveyance System is the core project for the LMCPR. The following design related activities occurred during August 2016:

- Kickoff meeting with MWH occurred on August 4-5, 2016.
- 90% Design review meetings with Technical Review Committee (TRC) occurred in August 2016.
- MSD met with City Planning Department to discuss future subdivision improvement plan for the VCS project area.
- Design team provided 90% VCS presentation for MWH team on August 23, 2016.
- VCS Project Manager turnover meeting occurred on August 31, 2016.
- Coordination on utility relocation regarding scope, cost estimates and schedule is ongoing with CSX, Duke Energy Electric, Duke Energy Gas, Cincinnati Bell, and GCWW. MSD met with Duke Energy Electric, Duke Energy Gas, and GCWW in August 2016.

The 2015 CIP conditionally approved funds for the miscellaneous expense activity for utility relocation which was moved from the estimated construction cost to the miscellaneous expense activity. Since these funds were not legislated in fiscal year 2015, the funds for utility relocation will be a future 2016 legislation request.

### Other LMCPR Projects

The LMCPR program includes a total of 20 projects, one of which is the Valley Conveyance System. The remaining projects are all actively underway. An overview of the project status during the current reporting period is provided herein. Project specific detailed information is provided in the monthly project reports posted to [www.projectgroundwork.org](http://www.projectgroundwork.org) on a monthly basis.

#### ***Projects Completed Construction***

The following projects are substantially complete:

- Harrison Avenue Phase A
- Harrison Avenue Phase B
- Rapid Run Park Source Control
- Queen City Avenue Sewer Separation Phase 1
- CSO 127 & 128 Stream Separation

#### ***Projects Under Construction***

The following projects are under construction:

- Sunset Avenue, Sunset Lane and Rapid Run Pike Sewer Separation
- White Street Sewer Separation

#### ***Projects In Bid Phase***

The following projects are at 100% design; have been legislated and are preparing to bid:

- Quebec Heights Sewer Separation



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- Queen City & Cora Avenues R/W Sewer Separation
- Wyoming & Minion Avenues Sewer Separation
- Lick Run Valley Conveyance System (Phase A Beekman Grant Project)
- Queen City Sewer Separation Phase 2 (Initial Contract)

### **Projects In Design**

The following projects have completed 60% design:

- CSO 125 Stream Separation
- CSO 217/483 Source Control Phase B

The following projects have completed 90% design:

- CSO 217/483 Source Control Phase C
- CSO 217/483 Source Control Phase A (basins)
- CSO 217/483 Source Control Phase A2 (sewer separation)
- Queen City Avenue Sewer Separation Phase 2
- Quebec Road Sewer Separation
- Lick Run Valley Conveyance System (Phase B)
- CSO 181 Real Time Control

### **Right-of-Way Status**

There are 90 project parcels in the Lick Run Valley Conveyance System subject to fee simple acquisition necessary for the construction through the main corridor. Note: a project parcel may be comprised of multiple tax parcels held by common ownership that has the same unity of use, e.g., the Klug property is comprised of 8 tax parcels all dedicated to the same use and thus designated as one project parcel. In addition, 6 City owned sites have been secured. The 90 project parcels have been acquired without appropriation court hearings and court mandated settlements. A second appropriation legislation was approved by the BoCC on April 6, 2016, requesting authorization to appropriate 1 full fee take, 1 billboard easement interest and multiple billboard leasehold interests on County owned property. The additional full fee take has been acquired and the LM CPR ROW group is diligently working with the billboard owner to reach agreements prior to filing the appropriations in court.

The post-60% right-of-way acquisition is currently under review or in appraisal phase. The current post-60% acquisition consists of the following project parcels: 23 easements, 2 partial fee takes, and 1 additional full fee takes for the Valley Conveyance System. Therefore, a total of 122 (90 + 6 + 23 + 2 + 1) acquisitions are needed for the Valley Conveyance System.

VCS easement acquisitions have been broken into tiers due the design being less than 90% complete and the urgency in moving forward acquiring easements that have been finalized. Tier one has eleven owners. All appraisals are in but only ten have been approved by right-of-way department for negotiation due to possible design changes. Offers have made on nine and three are under contract.

The following table summarizes the fee take acquisitions and City acreage needed for the Valley Conveyance System. As of July 2016, 100% of the fee property has been acquired or is owned by the City.

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Related right-of-way activities for the Lick Run Valley Conveyance System on-going through the current reporting period included:

- Relocation of Displacees: There are 11 active relocation cases. Active relocations may include tenants, business and landlord in which the relocation process has been initiated via research regardless of whether the property has been acquired.
- Demolition: Demolition for 11 properties (12 buildings from Phases C, D, and E) transferred to the Hamilton County Land Reutilization Corporation (HCLRC) is anticipated to be complete by late summer 2016. Demolition for Phase C and D buildings is anticipated to begin in August and be complete by October 2016. Abatement and Demolition for Phase E, Phase F, and remaining Phase B buildings is anticipated to be complete by Fall 2016. The last Legislation for Phase G has been submitted to the County for the remaining buildings.
- Environmental: An early construction package (Phase A Beekman Grant) will be initiated for soil remediation between Beekman Street and State Avenue in 2016 to use and meet the requirements of a Clean Ohio Revitalization Fund (CORF) Grant. Design for the Phase A Beekman Grant was completed in May 2016 and construction is estimated to begin in late 2016.

Related right-of-way activities on-going through August 31<sup>st</sup> included:

Lick Run VCS easement acquisition has been broken into tiers. Tier one has 11 project parcels, one owner has been removed from project four are under contract, all offers have been made. Tier two has 12 project parcels. There are a three part takes and numerous permanent and temporary easements. MSD R/W is still waiting on final drawings for one owner, and need go ahead to finish the appraisals on two others. GCWW will acquire the easements needed for water main relocation. All other appraisals are in reviewed and need final approval, which should be done by mid-September. Tiers 3&4 will depend on future needs and redesign.

For CSO 217/483 A-1 Source Control projects, there are several part-takes and some easements, still waiting for final go ahead. For A-2 there are 22 project parcels, all easements, one is a City owned parcel. For Phase B, that is currently under redesign, and Phase C has 5 project parcels, one City owned and out for appraisal Queen City Avenue Phase 2 Sewer Separation has 13 project parcels all easements with significant areas needed from a large apartment complex. All appraisals are in and under review Quebec Road Sewer Separation has 41 project parcels all easements, appraisal are and ready for review, MSD has requested assistance from City Real Estate office for appraisal reviews. CSO 181 Real Time Control projects two owners, offers have been made.

Memorandum of Understandings (MOU) /Right of Entry: MOUs are being prepared for seven LMCPD projects regarding land and/or maintenance of the assets on public domain property. The LMCPD MOUs are listed in the Capital Program Financials – Procurement Activities section of this report.

## LMCPR Critical Path Schedule

As of August 31, 2016, the LMCPR projects are on track to meet the Consent Decree milestone dates, with the exception of CSO 217/483 Source Control Phase B which is projected to not meet the finish milestone by -102 days. The following projects having aggressive schedule commitments: the Lick Run Valley Conveyance System, CSO 125 Stream Separation, Queen City Avenue Phase 2, Quebec Road, CSO 217/483 Source Control Phase A, CSO 217/483 Source Control Phase A2, CSO 217/483 Source Control Phase C, and CSO 181 Real Time Control projects are forecasting remaining float to WWIP substantial completion milestone date less than six months. MSD remains focused on maintaining and accelerating schedules for the discrete LMCPR projects.

Appendix F LMCPR Budget and Schedule Tracking Detailed Report includes the variance tracking to milestone dates and float considerations for potentially critical path activities. Schedule changes to the WWIP substantial completion milestone projections this month include revised construction finish for CSO 217/483 Source Control Phase B due to responding to County Resolution dated June 29, 2016 regarding model issues and evaluation of alternatives to the tank location. Evaluation of minimizing schedule impacts of final design and right of way is on-going to recover float. CSO 217/483 Source Control Phase A improved float based on evaluation of duration of activities and right of way schedule. Lick Run Property Demolitions end construction coincides now with the start of the Valley Conveyance Project (Phase B). Quebec Road Sewer Separation project end date shifted with right of way appraisal schedule.

The Valley Conveyance System schedule is dependent on many utility relocations and relocation of City facilities to occur in 2016. The construction legislation scheduled in Fall 2016 is based on completion and review of the 90% design submittal.

It is important to note the Valley Conveyance System is independent of all the other separation projects with respect to its start and finish construction dates. However, contractor coordination is being planned for the Valley Conveyance System and Quebec Road Sewer Separation projects which will be under construction at similar times and adjacent locations.

The following schedule dependencies have been identified among the sewer separation projects to address maintenance of traffic concerns and to allow for pipe connection tie-ins (downstream segment must be completed prior to upstream segment).

- Sunset Avenue Sewer Separation
  - Start with/before the start of Queen City Avenue Phase 2
  - Finish before the start of Quebec Road
  
- CSO 217/483 Source Control Phase C
  - Start approximately three to six month after start of CSO 217/483 Phase A
  - Start approximately three to six months after start of CSO 217/483 Phase A2

## LMCPR Program Financials

An overview of the budget status is presented in the following tables and a detailed accounting of projects costs is provided in Appendix F. The LMCPR Program is currently estimating total cost at \$233.9 million in 2006\$. This value will continue to be adjusted as projects progress through design and construction. **The LMCPR program remains within the \$244.3 million (2006\$) budget established by the Board of County Commissioners.** The current month program estimate in real dollars increased with the certification of the Program Management Services for the LMCPR including the Lick Run Valley Conveyance System project management with Montgomery Watson. Projects changes are noted in the LMCPR Project Variance Report.

Table 35 – LMCPR Program Estimate Overview

Description	Amount (2006\$)	Amount (Real\$)
LMCPR Program Budget <sup>1</sup>	\$244,367,000	
Program Estimate (as of 12/5/12) <sup>2</sup>	\$227,748,000	\$284,973,000
Previous Month Program Estimate	\$232,525,000	\$290,339,000
Current Month Program Estimate <sup>3</sup>	\$233,933,000	\$293,041,000
<b>Expenditures</b>		
Program Expenditures through Current Month	\$61,167,275	\$70,844,652
Program Expenditures through Current Month Percent	26.1%	24.2%
<b>Variances</b>		
Monthly Variance in Program Estimate	\$1,408,000	\$2,702,000
Monthly Variance in Program Estimate Percent	0.6%	0.9%
Current Month Program Budget Variance	(\$10,434,000)	
Current Month Program Budget Variance	-4.3%	
<b>Program Risk</b>		
Current Month Potential Changes Under Review <sup>3</sup>		\$1,216,000

**Notes:**

<sup>1</sup> As Referenced in the Lower Mill Creek Partial Remedy Study Report, December 18, 2012.

<sup>2</sup> As Referenced in the LMCPR Total Project Cost - Suite 3A 12-05-12.xlsx Document.

<sup>3</sup> Potential changes under review are estimated and not included in the Current Month Program Estimate.



Table 36 – LMCPR Projects Variance Report

Watershed	ID	Project Name	Project Status	August 2016 Project Estimate Reference	Estimates			Variances				
					December 05, 2012 Project Estimates <sup>1</sup>	July 2016 Project Estimates	August 2016 Project Estimates	December 2012 vs July 2016	July 2016 vs August 2016	Cumulative Variance	Cumulative Variance Percent	Reason for Cumulative Variance
<b>PROJECTS IN DESIGN</b>												
Kings Run	11243141	CSO 217/483 Source Control Phase B	Design - 60%	60%	\$14,155,000	\$15,489,000	\$14,194,000	\$1,334,000	(\$1,295,000)	\$39,000	0.3%	Allowance detail update; Construction contingency removed; Additional Design for change in project scope; Alternatives Analysis Class 4 OPCC update, OPCC reconciliation. Revised ROW estimate; 30% OPCC; 60% OPCC; Bottom-up Construction Services update; Miscellaneous update; Revised OPCC for relocated and resized CSO storage facility
Lick Run	11240000	Lick Run Valley Conveyance System	Design - 60%	60% (R1)	\$158,037,000	\$172,136,000	\$172,136,000	\$14,099,000	\$0	\$14,099,000	8.9%	Design budget correction per Notice of Advisement; Allowance detail update; Updated Design budget; Construction contingency removed; OPCC for 30% increase due to concrete box conduit unit price and overtime allowance; Decrease in construction duration reduced interest; Continued flow monitoring; Additional Pre-Construction Services for CMAR contract; Revised Construction Services bottom-up estimate. 60% OPCC and schedule update; Additional legislated Pre-Construction Services and Design; Decrease in Pre-Construction Services approved in additional legislation; Adjustments for Right-of-way estimate. Utility relocations, and WPCLF loan fee; Additional Design-phase funding for Beekman Grant; accounting adjustments; Revised 60% OPCC; Bottom-up Construction Services update; Utility relocation cost adjustment; Legislation and contract executed for LMCPR Program and VCS Project Management with MWH. Allocation to other LMCPR projects to be performed in the future
West Fork	10240018	CSO 125 Stream Separation	Design - 60%	60% (R2)	\$13,231,000	\$13,492,000	\$13,492,000	\$261,000	\$0	\$261,000	2.0%	Allowance detail update; Construction contingency removed; Escalated construction estimate due to schedule revisions. Additional Design and Miscellaneous Expense; Construction contingency removed; Updated Miscellaneous expense
Bloody Run	11240020	CSO 181 Real Time Control	Design - 90%	60%	\$4,481,000	\$4,382,000	\$4,387,000	(\$99,000)	\$5,000	(\$94,000)	-2.1%	Right of Way costs added; Construction contingency removed; Allowance detail update; Accounting adjustments; 60% OPCC; Bottom-up Construction Services update; Added WPCLF loan fee; Additional design
Lick Run	11240110	Quebec Rd Sewer Separation	Design - 90%	90%	\$8,688,000	\$9,202,000	\$9,202,000	\$514,000	\$0	\$514,000	5.9%	Allowance detail update; Construction contingency removed; 60% OPCC; additional design funds required for locating existing utilities; Escalated construction estimate due to schedule revisions; Adjustment for WPCLF fee; 90% OPCC; Bottom-up Construction Services update
Kings Run	11243140	CSO 217/483 Source Control Phase A and A2	Design - 90%/90%	90% / 90%	\$20,021,000	\$15,852,000	\$15,852,000	(\$4,169,000)	\$0	(\$4,169,000)	-20.8%	Allowance detail update; Construction contingency removed; 30% OPCC for ponds (portion of Phase A) decreased due to earthwork volumes and other design details; 60% OPCC for ponds and 30% OPCC for sewer separation decrease due to elimination of parallel sewer; OPCC reconciliation of 60% ponds and 30% sewer separation; additional Misc costs for wetland mitigation, value engineering, add'l PTI fee and additional flow metering; Interest removed since not ODWA loan. Additional legislation for Design and Miscellaneous Expense approved, 60% OPCC for sewer separation; Adjustments for Interest and WPCLF Fees; 90% OPCC for Phase A2; Bottom-up Construction Services update; Add'l design for ROW
Kings Run	10240021	CSO 217/483 Source Control Phase C	Design - 95%	95%	\$6,739,000	\$6,352,000	\$6,380,000	(\$387,000)	\$28,000	(\$359,000)	-5.3%	Revised 90% OPCC and construction duration; Allowance detail update; Construction contingency removed; ROW increase based on 90% design; Construction reduction due to escalation update; 95% OPCC; Bottom-up Construction Services update; Miscellaneous update; Additional design
Lick Run	11240130	Queen City Ave Sewer Separation Phase 2	Design - 95%	95%	\$11,016,000	\$12,803,000	\$12,803,000	\$1,787,000	\$0	\$1,787,000	16.2%	60% OPCC; Decrease from QCAP1; Allowance detail update; Construction contingency removed; 90% OPCC increased due to water quality unit, additional utility relocation, increased duration to 24 months, and construction soft costs; Allowance detail update; Escalated construction estimate due to schedule revisions; Increased Construction Services estimate due to early utility relocation construction phase; Bottom-up Construction Services update
<b>PROJECTS IN BID OR CONSTRUCTION</b>												
Lick Run	11240150	Queen City and Cora Avenues R/W Sewer Separation	Bid Phase (finalizing ROW)	100%	\$4,877,000	\$4,314,000	\$4,314,000	(\$563,000)	\$0	(\$563,000)	-11.5%	Allowance detail update; 60% OPCC refined quantities, unit prices and design contingency; Construction contingency removed; 90% OPCC; Escalated construction estimate due to schedule revisions; ROW estimate reduced; Interest removed since not ODWA loan; Additional Pre-Construction Services for project manager involvement in easement appropriations; Revised Construction Services bottom-up estimate; 100% OPCC
Lick Run	11240170	Quebec Heights Sewer Separation	Bid Phase (finalizing ROW)	100%	\$5,036,000	\$4,575,000	\$4,575,000	(\$461,000)	\$0	(\$461,000)	-9.2%	Combining of Ph1 & 2 into one contract; Updated Right of Way; 60% OPCC; Allowance detail update; Construction contingency removed; 90% OPCC; Escalated construction estimate due to schedule revisions; 100% OPCC and Construction Services estimate increase; ROW adjustment to actual costs

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Watershed	ID	Project Name	Project Status	August 2016 Project Estimate Reference	Estimates			Variances				Reason for Cumulative Variance
					December 05, 2012 Project Estimates <sup>1</sup>	July 2016 Project Estimates	August 2016 Project Estimates	December 2012 vs July 2016	July 2016 vs August 2016	Cumulative Variance	Cumulative Variance Percent	
Lick Run	11240030	Wyoming and Minion Avenues Sewer Separation	Bid Phase	100%	\$3,697,000	\$3,493,000	\$3,493,000	(\$204,000)	\$0	(\$204,000)	-5.5%	60% OPCC; Decrease from QCAP1; Allowance detail update; Construction contingency removed; Escalated construction estimate due to schedule revisions; Miscellaneous Expense adjustment for utility relocation; Additional Design for easement appropriation documents; 100% OPCC and Construction Services estimate increase; Added Interest to budget; 100% OPCC
Lick Run	11240090	White Street Sewer Separation	Construction	Awarded Bid	\$5,756,000	\$4,120,000	\$4,120,000	(\$1,636,000)	\$0	(\$1,636,000)	-28.4%	90% OPCC; Revised labor costs; Decrease in contingency; Allowance detail update; Reduction in number of parcels for ROW; Construction contingency removed; Legislation OPCC update which increased construction and soft costs; Miscellaneous Expense increased for utility relocation; 100% OPCC updated legislation request; Escalated construction estimate due to schedule revisions; ROW adjustment to actual costs; Construction contract awarded and de-legislation recognized
Lick Run	11240010	Sunset Ave, Sunset Lane & Rapid Run Pike Sewer Separation	Construction	Awarded Bid	\$10,511,000	\$8,491,000	\$8,463,000	(\$2,020,000)	(\$28,000)	(\$2,048,000)	-19.5%	90% OPCC; Detention Basin; Decrease from QCAP1; Allowance detail update; Construction contingency removed; Legislation OPCC update which decreased construction and soft costs; Miscellaneous Expense adjustment for utility relocation. Additional Design scope (detention, modeling, pipe sizing, easement revisions); Escalated construction estimate due to schedule revisions. Construction award; Construction services bottom-up estimate; Activity adjustment correction
Lick Run	11240001	Lick Run Property Demolitions	Construction - Phase B C D E. Future Phases - Phase G	Multiple	\$4,463,000	\$4,259,000	\$4,248,000	(\$204,000)	(\$11,000)	(\$215,000)	-4.8%	Legislation request for Phase B of Demolition; Con. Services amount updated for multiple contracts versus one contract; Interest removed since not ODWA loan; Construction contingency removed; Activity adjustment correction
<b>PROJECTS SUBSTANTIALLY COMPLETE</b>												
West Fork	11243840	CSO 127 and 128 Stream Separation	WWIP Substantial Completion	Contract	\$700,000	\$347,000	\$347,000	(\$353,000)	\$0	(\$353,000)	-50.4%	Allowance detail update; Construction contingency removed; Interest removed since not ODWA loan; 60% OPCC update refinement, 90% OPCC update; construction contract awarded; ROW adjustment to actual costs
Lick Run	11240051	Harrison Avenue Sewer Separation Phase B	WWIP Substantial Completion	Contract	\$1,791,000	\$1,433,000	\$1,433,000	(\$358,000)	\$0	(\$358,000)	-20.0%	90% OPCC; Design Phase services close-out underway; ROW reduction; Allowance detail update; Pre-Construction Services at completion equal to actual; Interest removed since not ODWA loan. Construction contract awarded and de-legislation recognized; Accounting adjustments; Proposed de-legislation after construction phase; Construction change order and additional Miscellaneous funds requested; Reduced estimate to complete until final payments.
Lick Run	11240270	Queen City Ave Sewer Separation Phase 1	WWIP Substantial Completion	Contract	\$6,756,000	\$8,271,000	\$8,212,000	\$1,515,000	(\$59,000)	\$1,456,000	21.6%	Scope shift to QCAP1; Relocation of water line; Design Phase services close-out underway; ROW reduction; Allowance detail update; Construction award; Duke pole relocation cost and delay, Construction Services increase due to increase construction duration. Construction contingency removed; Allowance detail update; Construction change orders; Duke relocation charges to Construction moved to Misc Expense; Interest adjustment to actuals
Lick Run	11040010	Rapid Run Park Source Control	WWIP Substantial Completion	Contract	\$2,100,000	\$1,897,000	\$1,897,000	(\$203,000)	\$0	(\$203,000)	-9.7%	Two alternates added; increased duration due to winter construction season; Allowance detail update; Construction award; Interest removed since not ODWA loan, Credit for Grant reimbursement; Construction Change Order for final material quantities; removed Contingency; Construction Change Order for quantities finalized; additional Construction Services funds requested
Lick Run	11240050	Harrison Avenue Sewer Separation Phase A	WWIP Substantial Completion	Contract	\$2,918,000	\$2,133,000	\$2,133,000	(\$785,000)	\$0	(\$785,000)	-26.9%	Construction phase close-out underway; Allowance detail update; Final pay application pending, reinstated future spending; Interest removed since not ODWA loan; Reduced estimate to complete until final pay application pending DOTE close-out; DOTE close-out payment; Final project close-out
<b>TOTALS</b>					<b>\$284,973,000</b>	<b>\$293,041,000</b>	<b>\$291,681,000</b>	<b>\$8,068,000</b>	<b>(\$1,360,000)</b>	<b>\$6,708,000</b>	<b>2.4%</b>	

Notes:

<sup>1</sup> As referenced in the LMOPR Total Project Cost - Suite 3A 12-05-12.xlsx Document.

OPCC = Opinion of Probable Construction Cost

EAC = Estimate at Complete

LAR = Legislation Action Request

## ODOT COORDINATION PROGRAM

In 2008, MSD and the Ohio Department of Transportation (ODOT) began collaborating on infrastructure improvements related to the planned reconstruction of the I-75 corridor and MSD's concurrent mandate to mitigate CSOs to the Mill Creek. The level of capital investment required for both the ODOT highway reconstruction and MSD's implementation of its Wet Weather Improvement Program, both estimated in the billions of dollars, is unprecedented and opens the door for significant optimization of infrastructure benefits while minimizing fiscal impact on local residents and rate payers. ODOT's planned reconstruction of I-75 extends from Kemper Road south to the Ohio River, encompassing an alignment of over 17 miles that crosses through 10 Mill Creek sub-watersheds and numerous municipalities and City of Cincinnati neighborhoods. An update of on-going coordination with ODOT is provided in the tables below.

Table 37 – Summary of Active ODOT Projects

ID	Name	Status	ODOT Schedule	July Actions
11242841	CSO 12 Phase A.2 (HAM-75-2.30)	ODOT Construction	MSD work completed	ODOT's Contractor has completed all the MSD work.
11143100	CSO 30 Stream Separation (HAM-75-5.85)	Warranty	Correction on going	All MSD pay items are complete. ODOT correction work ongoing. Working on final invoice from ODOT.
11143260	CSO 21 I-75 Reconstruction (HAM-75-3.85)	Design & ROW	Construction Sept 2017 – Easements due Sept 2016	The easement acquisition process is ongoing. The CSX easement is being appropriated. Other private easements are closed. Plans are being finalized with ODOT.
N/A	HAM-75-6.78	ODOT Construction	Construction	No MSD work this month.
12240365	I-71 at Martin Luther King Drive (HAM-71-3.81)	ODOT Design/Build with MSD Review	Construction	ODOT's contractor is installing the storm sewers and catch basins along local roadways and testing pipe. The repair of the Duramax pipe is complete and final video inspection is pending.
11142741	CSO 488/490 I-75 Reconstruction (HAM-75-7.85)	ODOT Design	Construction start in 2020	ODOT has provided final tracings for review. MSD is revisiting options for a collaborative project.
11180000	CSO 181 I-75 Reconstruction (HAM-75-7.85)	ODOT Design	Construction start in 2020	ODOT has provided final tracings for review.
N/A	Duck Creek Connector	Design-Build	Design-Build	MSD provided comments for Stage 1 plans. ODOT submitted Stage 2 plans for review.



Table 38 – Summary of ODOT Coordination Projects in Planning

ID	Name	Status	ODOT Schedule	July Actions
11242910	Thru-the-Valley I-75 Reconstruction (HAM-75-12.60, 11.05, 11.09, 10.87, 10.52, 10.10, 14.61)	Planning	Varies	Planning continuing. Technical and Modeling memo comment resolution is ongoing. ODOT continues redesign of the Phase 5 project and may eliminate the conflict at CSO 226.
11142750	Brent Spence Bridge Reconstruction	Planning	Unknown. Project will be design/build	Revisions and follow-up to Flow Monitoring Assessment Tech Memo and draft Hydraulic Model Gap Analysis and Assessment Technical Memo continue. Consultant submitted Draft Flow Monitoring Review Memo. ODOT has requested a meeting on their drainage study.



## OPERATIONS REPORT

This section of the report highlights some operational activities.

### Payments to the City

MSD is continuing to develop agreements with other city departments to cover transfers, payments and disbursements where appropriate. This information is provided herein. The following interdepartmental payments and transfers were made during August 2016 for the operating budget and the detailed accounting of the services is listed in Appendix G.

**Table 39 – Summary of Interdepartmental Payments**

Budget Year 2016	
Department	ID Bill Amount
Accts & Audits	\$421,938
Environmental Quality	\$
ETS	\$22,662
Fleet	\$130,371
GCWW	\$455,180
MSD	\$
Office of the City Manager	\$
Public Services	\$ -
Purchasing	\$15,735
Risk Management	\$586,724
Treasury	\$38,165
<b>Total</b>	<b>\$ 1,670,774</b>

The following interdepartmental payments and transfers made during August 2016 for capital projects.

**Table 40 – Capital (Budget Fund 704) Interdepartmental Payments**

Project ID	Service Dept	Accounting Date	Amount	Description
(blank)	300	2016/08/14	\$ 6,271.38	GCWWB
<b>Total</b>			<b>\$ 6,271</b>	

## CSO Bypass Events

During August 2016 MSD experienced bypasses at the CSO locations listed in the following table. Correspondences provided to Ohio EPA regarding these events have been uploaded to MSD's SharePoint site.

**Table 41 – Summary of Monthly CSO Bypass Events**

Location	Dates
CSO 404 6441 River Rd Ivanhoe Street	August 6 <sup>th</sup> , 23 <sup>rd</sup> , 25 <sup>th</sup>
CSO 422 2715 River Rd	August 14 <sup>th</sup>
CSO 024 Ludlow Run Regulator	August 18 <sup>th</sup>
CSO 507 214 Clark Rd Grating	August 19 <sup>th</sup>
CSO 402 46 Thornton Avenue	August 19 <sup>th</sup> & 23 <sup>rd</sup>
CSO 483 4720 Este Avenue	August 19 <sup>th</sup>
CSO 179 4256 Spring Grove Avenue	August 19 <sup>th</sup>
CSO 416 3525 Southside Avenue	August 21 <sup>st</sup>
CSO 447 208 Collard Street	August 22 <sup>nd</sup>
CSO 451 1932 Riverside Drive	August 23 <sup>rd</sup>
CSO 432 1250 W 8 <sup>th</sup> Street	August 23 <sup>rd</sup>
CSO 554 6714 Ken Arbore Drive	August 26 <sup>th</sup>

## WWTP Bypass Events

During August 2016 MSD experienced bypasses at the treatment plant locations listed in the following table. Correspondences provided to Ohio EPA regarding these events have been uploaded to MSD's SharePoint site.

**Table 42 – Summary of Monthly Treatment Plant Bypass Events**

WWTP	Location	Dates
Mill Creek	East Branch Gate #1 Throttled	August 28 <sup>th</sup>
	East Branch Gate #2 Throttled	August 28 <sup>th</sup>
	East Branch Gate #3 Throttled	August 27 <sup>th</sup> & 28 <sup>th</sup>
	Mill Creek Auxiliary Interceptor	None Reported
	Mill Creek Interceptor	None Reported
Muddy Creek	Muddy Creek Pump Station	August 1 <sup>st</sup> , 9 <sup>th</sup> , 13 <sup>th</sup> , 14 <sup>th</sup> , 15 <sup>th</sup> , 16 <sup>th</sup> , 17 <sup>th</sup> , 18 <sup>th</sup> , 19 <sup>th</sup> , 20 <sup>th</sup> , 21 <sup>st</sup> , 22 <sup>nd</sup> , 26 <sup>th</sup> , 27 <sup>th</sup> , 28 <sup>th</sup> , 29 <sup>th</sup> , 30 <sup>th</sup> & 31 <sup>st</sup>
	Muddy Creek WWTP	August 13 <sup>th</sup> , 15 <sup>th</sup> , 16 <sup>th</sup> , 17 <sup>th</sup> , 20 <sup>th</sup> , 26 <sup>th</sup> & 28 <sup>th</sup>
Little Miami	Auxiliary Outfall	August 15 <sup>th</sup> , 17 <sup>th</sup> & 28 <sup>th</sup>
Sycamore	High Rate Treatment	August 15 <sup>th</sup> , 17 <sup>th</sup>
Pump Station	Addyston	August 17 <sup>th</sup> , 20 <sup>th</sup>
Pump Station	Dry Run	August 17 <sup>th</sup> , 28 <sup>th</sup>
Pump Station	Glenview	August 15 <sup>th</sup> , 17 <sup>th</sup>

## Safety Performance

MSD is dedicated to providing employees with a safe work environment. During August 2016 work included:

- Review of 41 confined space entry permits
- Reviewed/Revised/Updated JHAs written by WWT
- Updates & revisions of Emergency Response Plans.

### Accidents and Incidents

The following incidents were documented during August 2016. This included 5 recordable injuries and accidents.

**Table 43 – Summary of Monthly Accidents & Incidents**

Date	Type	Department	Corrective Action
8/1/2016	Injury	RCS-Safety	Preventable ; not wearing PPE
8/12/2016	Injury	WWC Customer Service	Preventable ; improper procedure
8/11/2016	Injury	WWE Legislation	Preventable ; improper procedure
8/17/2016	Injury	WWT-Heavy Equipment	Preventable ; improper procedure
8/23/2016	Injury	WWC Maintenance	Preventable ; improper procedure
8/31/2016	Injury	WWT Special Projects	Preventable; inattention to surroundings
8/8/2016	Vehicle	WWE Legislation	Preventable ; inattention to surroundings
8/16/2016	Vehicle	RCS-DIW	Non-Preventable
8/18/2016	Property Damage	WWC Sewer System Evaluation	Preventable ; inattention to surroundings

### Miscellaneous/Training

The following safety training classes/meetings were provided to MSD employees during August 2016:

**Table 44 – Summary of Monthly Safety Training Sessions**

Course Title	Sessions	Participants
MSD Asbestos Bldg. Inspector/Mng Plan	1	1
MSD CPR/First Aid/Bloodborne	2	26
MSD Confined Space Refresher	1	11
MSD Disaster Management Wastewater	1	41
MSD Injury and Accident Procedure	1	18
MSD Hazcom Update	1	16
MSD Bloodborne Pathogen	2	11

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MSD Forklift Train the Trainer	1	4
MSD Walking Working Surfaces	1	WWT Personnel
MSD Traffic Control	1	10

**Meetings and Inspections**

The following safety related activities were completed during August 2016.

**Table 45 – Safety Meetings & Inspections**

Safety Meetings	Inspections & Audits
ADA Committee Meeting	Employee PPE distribution (foot, eyewear etc...)
WWC Safety Orientation	Cincinnati Zoo Filtration System, Planning and Sustainability
Central Safety Committee	(SDS database) maintenance response & updates
WWC Staff Meeting	Injury/Incident Reporting Investigation/Recordkeeping
WWT Maintenance Safety Meetings	Mill Creek CMF/EQ/Aeration/SAA Weekly Area Inspections (4)
RCS Safety Team Meeting	Mill Creek Safety & Security Assessment
Healthy Lifestyles Wellness Committee Meeting	Equip. Maintenance/Calibrations MX4 (42)
	WWC Field Crew Inspection (2)
	Spill kit monthly inspections
	WWC Security Assessment
	Respiratory Protection Questionnaires/Testing
	DBI Fall Protection Retrofit

## **APPENDICES**

Appendix A – Monthly Program & Project Controls Scorecard  
Appendix B – Monthly Projects Schedule and Budget Variance Report  
Appendix C – Monthly Cash Flow Forecast Report  
Appendix D – Monthly Detailed Allowances Expenditures Report  
Appendix E – MSD Bid Board Summary  
Appendix F – LM CPR Budget and Schedule Tracking Detailed Report  
Appendix G – Interdepartmental Transfers and Payments Report  
Appendix H – De-legislation (not provided this reporting period)  
Appendix I – 2015 CIP Variance Report  
Appendix J – Phase 1 (non-LM CPR) WWIP Milestone Float Report  
Appendix K – Baseline Detailed Report

This report represents a high-level summary of Enterprise Management activities during the preceding month. Questions regarding the content of this document should be submitted to the MSD Director of Sewers ([Gerald.Checco@cincinnati-oh.gov](mailto:Gerald.Checco@cincinnati-oh.gov)).

### Distribution List:

Aluotto, Jeff - Interim County Administrator  
Arnette, Pat – MSD Engineering  
Ball, Karen – Hamilton County  
Black, Harry – City Manager  
Caprio, Teresa – Hamilton County Monitor Team  
Checco, Gerald – MSD Director  
Christy, Diana – MSD Legal  
Graf, Joe - Hamilton County Monitor Team  
Hill-Christian, Sheila – Asst. City Manager  
Lodor, MaryLynn – MSD Deputy Director  
McCoy, Ian - MSD  
Meyer, Dave – Hamilton County Director of Utility Oversight  
Pittinger, Mike - MSD  
Proctor, Jeff – Hamilton County Monitor Team  
Rennekamp, Jack – MSD  
Richmond, Jenny – MSD  
Smedley, Vanessa – MSD  
Smith, Bruce, MSD  
Tadros, Ihab - MSD