



PROJECT GROUNDWORK
your pipeline to clean water

Lick Run Project

The Lick Run Project – part of the Metropolitan Sewer District of Greater Cincinnati’s (MSD) solution for Lower Mill Creek – will eliminate nearly 400 million gallons of combined sewer overflows (CSOs) into the Mill Creek each year during a typical year of rain. The project will also improve water quality, create new jobs, and provide opportunities for neighborhood revitalization.

Challenge in Lower Mill Creek

During rains, our combined sewer system can overflow into streams and rivers, making Cincinnati among the top five communities in the U.S. for combined sewer overflows (CSOs).

MSD is under a federal mandate (Consent Decree) to reduce the overflows and has implemented a major public works initiative called “Project Groundwork” to achieve compliance and bring value to the community through this significant investment.

More than half of our 11 billion gallons in annual overflows occur in the Lower Mill Creek watershed, which covers 40,000 acres in the heart of Cincinnati.

As a result, MSD is implementing a near-term solution called the “Lower Mill Creek Partial Remedy (LMCPR)” that seeks to significantly reduce the overflows by 2018. Additional solutions will be implemented after 2018.

Lower Mill Creek Solution

MSD’s Lower Mill Creek solution — which was officially approved by the U.S. EPA in May 2013 — will eliminate about 1.78 billion gallons of CSOs annually into the Mill Creek.

The remedy seeks to reduce CSOs by primarily focusing on reducing the amount of stormwater entering combined sewers during heavy rains.

This approach uses a combination of green infrastructure (e.g., stream restoration, wetlands, bioswales, rain gardens and stormwater detention basins) and gray infrastructure (e.g., new storm sewers) to provide cost-effective solutions with community benefits.

The remedy includes projects in the Lick Run, Kings Run, Bloody Run, and West Fork watersheds. Overall project costs are estimated at \$244 million (in 2006 dollars).

Lick Run Watershed

The Lick Run watershed covers about 2,900 acres on Cincinnati’s west side. It includes Cincinnati’s South Fairmount neighborhood and portions of East and West Price Hill and Westwood.

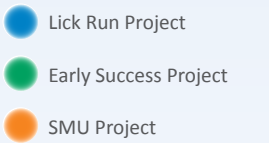
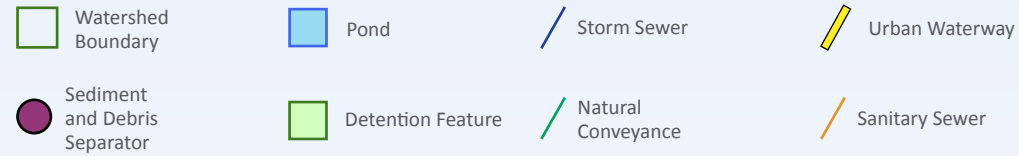
Every year, about half a billion gallons of sewage and stormwater overflow from the Lick Run watershed through the CSO 5 outfall into the Mill Creek. CSO 5 is the largest volume CSO in MSD’s service area.

The Lick Run Project will eliminate nearly 400 million gallons of the total 528 million gallons of CSOs annually during a typical year of rain. This project will keep stormwater out of the combined sewer system through a series of gray and green stormwater management projects across the watershed.



Sewer overflow at CSO 5 in South Fairmount

Lick Run Project



1 Harrison Avenue Phase A

Completed in Fall 2013. New storm sewers along Harrison Avenue. Coordinated with Cincinnati Department of Transportation & Engineering (CDOTE) road work. A curb-side bumpout planter at Tremont Street was installed in Spring 2014.

2 Rapid Run Park Bioswale

Completed in Fall 2014. First green project completed in Lick Run. Bioswale at Rapid Run Park and new storm sewers. MSD partnered with the Cincinnati Park Board and received an ODNR grant.



3 Harrison Avenue Phase B

Completed in Spring 2015. New storm sewers along Harrison Avenue, Moellering Avenue and Beekman Street near the Western Hills Viaduct.

4 Queen City Avenue Phase 1

Completed in Spring 2015. New storm sewers along Queen City Avenue from Queen City Bypass to Sunset Avenue and along Tillie/Champlain.

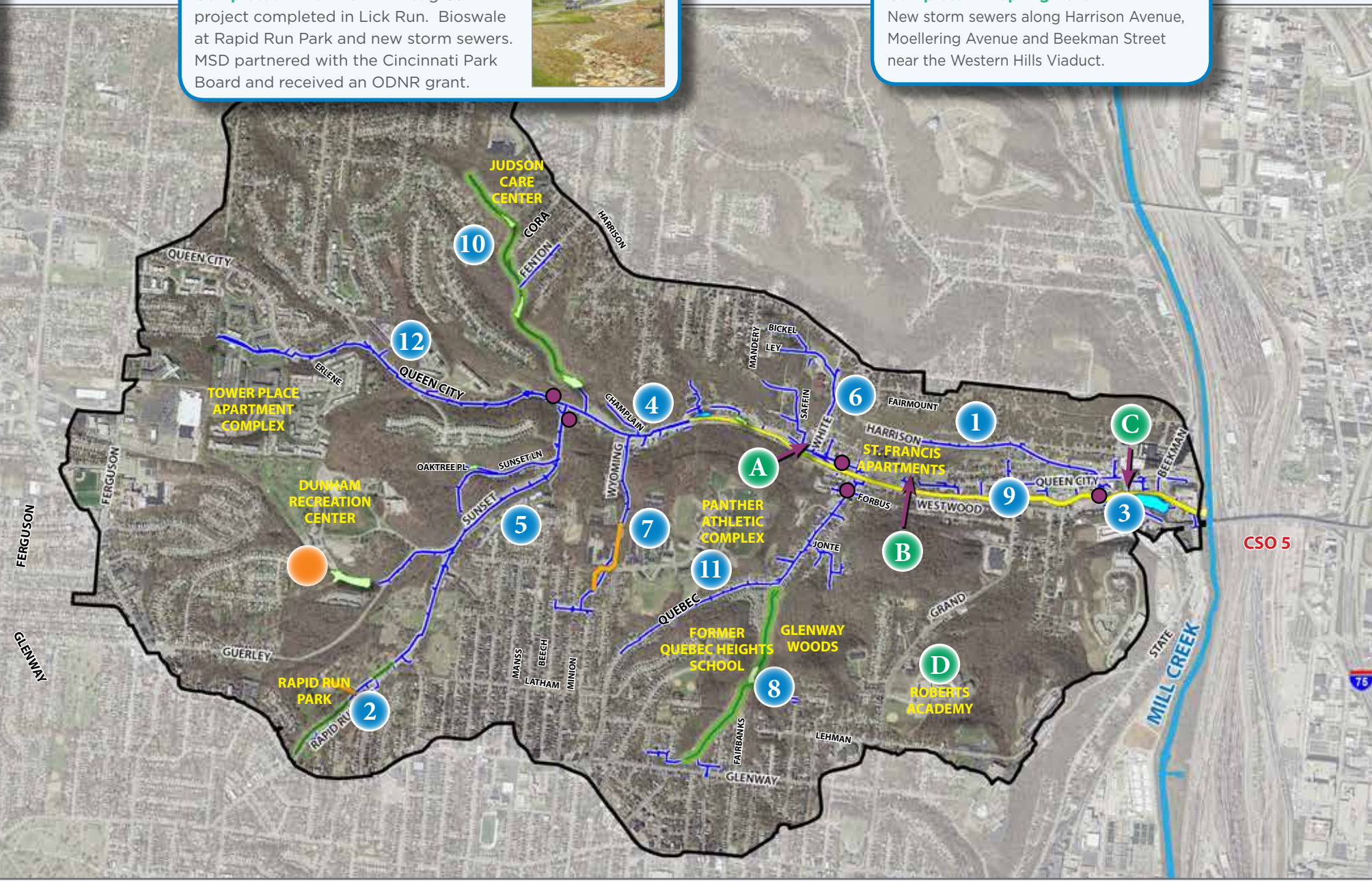
Early Success Projects

- A San Antonio Church**
Permeable pavers and four small bioinfiltration basins (rain gardens) were installed in 2011.
- B St. Francis Court Apartments**
Two unused parking lots were converted to bioinfiltration basins (rain gardens) in 2010.
- C Immanuel United Church**
A bioinfiltration basin (rain garden) was installed in 2010.
- D Roberts Academy**
Retrofit of an existing stormwater detention basin and five new bioinfiltration basins installed in 2014.



Guerley Road Detention Dam

Completed in Summer 2014. Large stormwater detention dam off Guerley Road. This project helps reduce street flooding and CSOs.



5 Sunset Avenue

Completed in December 2015. New storm sewers along Sunset Avenue/Rapid Run Pike, Sunset Lane and Guerley Road and a new stormwater detention basin off Sunset Lane.

6 White Street

Completed in Summer 2017. New storm sewers along White Street and multiple adjacent streets.

7 Wyoming & Minion Avenues

Under Construction. New storm sewers along Wyoming Avenue and multiple adjacent streets. Anticipated construction: Spring 2017 - Spring 2018.

8 Quebec Heights

Under Construction. Restoration of a stream in Glenway Woods that was enclosed in a combined sewer, retrofit of one existing stormwater detention basin and new storm sewers. Partnering with Cincinnati Parks. Anticipated construction: Spring 2017 - Spring 2018.

12 Queen City Avenue Phase 2

Starting in the Fall. New storm sewers along Queen City Avenue from Sunset Avenue to an apartment complex off East Tower Drive. Anticipated construction: Fall 2017 - Fall 2019 (substantially complete per Consent Decree by Dec. 31, 2018).

11 Quebec Road

Starting in the Fall. New storm sewers along Quebec Road and multiple adjacent streets. Anticipated construction: Fall 2017 - Fall 2018.

10 Queen City and Cora Avenues

Starting in the Fall. Restoration of a stream in a ravine behind the Judson Care Center that was enclosed in a combined sewer, retrofit of three existing stormwater detention basins and new storm sewers along Fenton Avenue and at bottom of ravine. Anticipated construction: Fall 2017 - Fall 2018.

9 Lick Run Greenway

Under Construction. Mile-long waterway (constructed creek) and underground stormwater conveyance box. Anticipated construction: Summer 2017 - Fall 2019 (substantially complete per Consent Decree by Dec. 31, 2018).

Project Details

Overview of the Lick Run Project

The Lick Run Project is comprised of 12 separate projects that together will collect about 500 million gallons of stormwater a year from the Lick Run watershed and convey it to the Mill Creek.

The Lick Run Project will be under construction through 2019 and is estimated to cost ~\$193 million. The main feature is the Lick Run Greenway, which includes a mile-long creek through the heart of South Fairmount. The other 11 projects will convey stormwater to the Greenway.

Helping keep stormwater out of MSD's combined sewer system will reduce sewer overflows into the Mill Creek and also reduce the amount of wastewater treated at the Mill Creek treatment plant.

The projects — described in detail in the map on the inside spread — include (in order of construction starts):

- Harrison Avenue, Phase A **(completed)**
- Rapid Run Park Bioswale **(completed)**
- Harrison Avenue Phase B **(completed)**
- Queen City Avenue Phase 1 **(completed)**
- Sunset Avenue, Sunset Lane and Rapid Run Pike **(completed)**
- White Street **(completed)**
- Wyoming and Minion Avenues **(under construction)**
- Quebec Heights **(under construction)**
- Lick Run Greenway **(under construction)**
- Queen City and Cora Avenues
- Quebec Road
- Queen City Avenue Phase 2

Lick Run Greenway in South Fairmount

The Lick Run Greenway (see map below) will be located in South Fairmount from old Queen City Avenue to the Mill Creek between Queen City and Westwood avenues. This area is a gateway to the west side of Cincinnati from I-75 and downtown Cincinnati.

The Greenway will include a mile-long creek with a meandering channel, natural stone, runs, pools and riffles and a bank planted with native plants and trees. An underground stormwater conveyance box will be constructed beneath the creek to handle flows from heavy rains. The Greenway will also include a special wetland, headwaters area (where the creek starts) and a pond, among other features.

The Greenway also includes multi-use paths, lighting, signage, retaining walls, improved recreational space, off-street parking, five vehicular bridges and one pedestrian bridge.

Construction began in July 2017 and will continue through Fall 2019.



Conceptual rendering of recreational space in Lick Run Greenway at 100% Design

Lick Run Greenway at 100% Design



For more information:

Visit the Lick Run website at www.projectgroundwork.org/lickrun
Contact MSD Engineering Customer Service at (513) 557-3594 or MSD.Communications@cincinnati-oh.gov