



PROJECT GROUNDWORK
your pipeline to clean water

Rapid Run Bioswale

The Rapid Run bioswale is part of MSD's Lick Run Project and will help 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.

Background

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

The Metropolitan Sewer District of Greater Cincinnati (MSD) is under a federal order to reduce the overflows and has implemented a major public works initiative called "Project Groundwork" to achieve compliance and bring value to our communities through this multi-year and multi-billion investment.

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 integrates green infrastructure (e.g., stream restoration, wetlands, bioswales, rain gardens and stormwater detention basins) with gray (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.



Rapid Run Park: Before



Rapid Run Park: After

Project Details

The Rapid Run bioswale, located at Cincinnati's Rapid Run Park, is the first green infrastructure project constructed as part of MSD's Lick Run Project.

Completed in Spring 2015 in partnership with the Cincinnati Park Board, the project includes about 1,600 linear feet of bioswale with step pools.

The bioswale uses native plants, special soils and layers of gravel to absorb, store and clean the water. About 50 trees, 160 shrubs and 35,000 plants were planted in and around the bioswale.

The project also includes the construction of about 1,900 linear feet of new storm sewers along the adjacent roadway, the disconnection of downspouts at the park shelter and construction of new storm sewers and a sanitary lateral at an adjacent playground and ballfield.

This new stormwater conveyance system will eventually connect to new stormwater sewers along Sunset Avenue and ultimately to the Lick Run Greenway in South Fairmount that discharges into the Mill Creek.

The project was partly funded by a grant through the Ohio Department of Natural Resource's Division of Forestry.

This effort will keep nearly 15 million gallons of stormwater out of MSD's combined sewer system each year and help reduce CSOs into the Mill Creek.

Project Benefits

- Reduces combined sewer overflows (CSOs) into the Mill Creek
- Improve water quality
- Provides habitat for plants and animals
- Adds an attractive feature to the park



Rapid Run bioswale during a rainstorm

Need More Information?

Visit the Lick Run Project website at www.projectgroundwork.org/lickrun

Contact MSD Engineering Customer Service at **(513) 557-3594** or MSD.Communications@cincinnati-oh.gov