

Project Details

Overview of the LMCPR West Fork Project

MSD's LMCPR West Fork Project includes two individual projects that will be constructed between 2015 and 2017 in Northside and Mt. Airy. Together, they will reduce sewer overflows into the West Fork Channel by about 173 million gallons a year. The projects — *highlighted in the map on the inside spread* — include:

- CSO 125 Stream Separation Project
- CSO 127 and 128 Stream Separation Project

The map also includes other MSD projects in the West Fork watershed that will help reduce CSOs, including an early success project in the West Fork Channel floodplain, a Phase 1 wet weather project (Westwood Northern Bundle) and two sewer replacement projects (see below for more details).

CSO 125 Stream Separation Project

The CSO 125 Stream Separation project will collect stormwater in two stormwater detention basins — the North and Martha basins — and will discharge it to the West Fork Channel through an underground outlet pipe. This project will reduce overflows from CSO 125, the largest volume overflow location in the West Fork watershed.

North Basin: The North Basin — located off Kirby Avenue just northwest of Mehmert Avenue — will be about 21 acres in size and will hold up to 5.8 million gallons of stormwater. The basin will be about 25 feet deep at its deepest point.

The basin will collect stormwater from nearby streams as well as from overland flow.

The basin will slowly release the water into the underground stormwater outlet pipe along Virginia/Kirby Avenues.

An access road off Kirby Avenue will allow MSD personnel to gain access to the basin for maintenance.

Martha Basin: The Martha Basin — located south of Martha Street between Virginia/Kirby Avenues and Badgeley Street — will be about 2.2 acres in size and will hold up to 0.75 million gallons of stormwater. The basin will be about seven feet deep at its deepest point.

The basin will collect stormwater from nearby streams as well as from overland flow.

The basin will slowly release the water into the underground stormwater outlet pipe. The four-foot-diameter outlet pipe, which connects to both basins, will discharge into the West Fork Channel.

A driveway off Martha Street will allow MSD personnel to gain access to the basin for maintenance.

Anticipated construction: Summer 2016 to Fall 2017

CSO 127 and 128 Stream Separation Project

The CSO 127 and 128 Stream Separation project will collect stormwater runoff from Mt. Airy Forest and West Fork Road and discharge it to the West Fork Channel through a new stormwater sewer (at CSO 128 location) and a combined sewer converted to a stormwater sewer (at CSO 127 location). The project will reduce overflows into the West Fork Channel from CSOs 127 and 128.

Anticipated construction: Summer 2015 to Winter 2015



Example of a stormwater detention basin

Other MSD Projects

MSD is implementing the following other projects in the West Fork watershed:

West Fork Creek Riparian/Floodplain Restoration Project: MSD — in partnership with Groundwork Cincinnati/Mill Creek will construct a stormwater bioinfiltration basin in 2014 in the West Fork Channel floodplain in Northside.

The project, partially funded by a Clean Ohio Conservation Fund grant, will prevent about 500,000 gallons of stormwater from entering the combined sewer system annually.

The basin will be located in the vicinity of 1759 West Fork Road and will be about 0.8 acres in size and 4-6 feet deep.

Anticipated construction: 2014

Westwood Northern Bundle and MSD Sewer Replacement Projects: The Westwood Northern Bundle is a Phase 1 wet weather (Consent Decree) project to reduce CSOs into tributaries of West Fork Creek in Mt. Airy Forest. MSD is also implementing two asset management projects to reduce overflows from a temporary CSO in Mt. Airy Forest and from CSO 130 into the West Fork Channel.

Anticipated construction: see map



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West Fork Project

The West Fork Project — part of the Metropolitan Sewer District of Greater Cincinnati's (MSD) solution for Lower Mill Creek — will eliminate about 173 million gallons of combined sewer overflows (CSOs) each year into the West Fork Channel, a tributary of the Mill Creek. The project will improve water quality, create new jobs and provide opportunities for neighborhood revitalization.

What's the Challenge?

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 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.

Focus on Lower Mill Creek

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 (Phase 1 of Project Groundwork). 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 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, raingardens and stormwater detention basins) with gray (e.g., new storm sewers) to provide cost-effective solutions with community benefits.

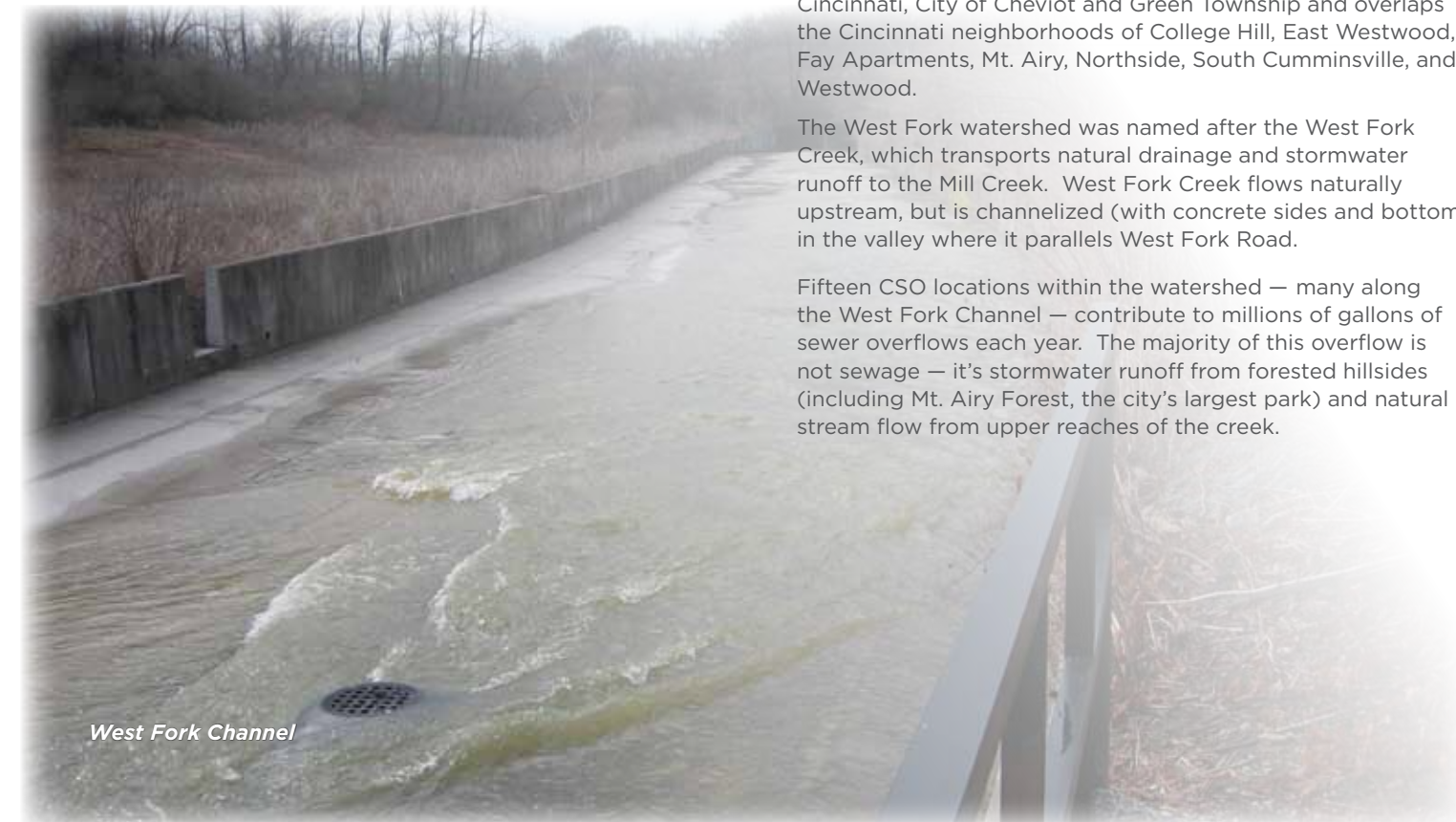
The remedy includes projects in the Lick Run, Kings Run, Bloody Run, and West Fork watersheds. Overall project costs are estimated at \$244 million (in 2006 dollars).

West Fork Watershed

The West Fork watershed — a subwatershed of Lower Mill Creek — covers more than 6,000 acres within the City of Cincinnati, City of Cheviot and Green Township and overlaps the Cincinnati neighborhoods of College Hill, East Westwood, Fay Apartments, Mt. Airy, Northside, South Cumminsville, and Westwood.

The West Fork watershed was named after the West Fork Creek, which transports natural drainage and stormwater runoff to the Mill Creek. West Fork Creek flows naturally upstream, but is channelized (with concrete sides and bottom) in the valley where it parallels West Fork Road.

Fifteen CSO locations within the watershed — many along the West Fork Channel — contribute to millions of gallons of sewer overflows each year. The majority of this overflow is not sewage — it's stormwater runoff from forested hillsides (including Mt. Airy Forest, the city's largest park) and natural stream flow from upper reaches of the creek.



West Fork Channel

For more information:

Visit www.projectgroundwork.org/westfork or

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

WEST FORK WATERSHED PHASE 1 PROJECTS

