



STORMWATER ACTION CENTER FACT SHEET

Name of Project:

Middle Blue River Basin
Green Solutions Pilot
Project

Location:

Kansas City, Missouri

County:

Jackson County

Watershed:

Blue River Watershed

Website:

<https://www.landscapeperformance.org/case-study-briefs/middle-blue-river-basin-green-solutions-pilot-project>

MIDDLE BLUE RIVER BASIN GREEN SOLUTIONS PILOT PROJECT – KANSAS CITY, MISSOURI

OVERVIEW:

The Middle Blue River Basin Green Solutions Pilot Project was the first large-scale green infrastructure project for Kansas City's Overflow Control Program. Like many cities that suffer from Combined Sewer Overflows (CSOs), Kansas City is in the process of exploring several traditional and sustainable "green" alternatives to meet EPA water quality standards. The 100-acre pilot project, located in a largely residential neighborhood, tested the effectiveness of green infrastructure improvements within the public street right-of-way to intercept, detain, and control the amount of stormwater entering the combined sewer system. Prior to this project, the 75-year-old neighborhood was characterized by deteriorating street and sewer infrastructure and localized flooding. Through this pilot project, which is celebrated as the first "KC Green Neighborhood," the City has determined that green infrastructure can be effective and economically viable.

BENEFITS:

- Reduces overall stormwater runoff volume by approximately 80%.
- Reduces stormwater peak runoff flow by 76% (9.2 cfs) and peak volume by 36% (39,000 gallons) for a 1.4-in storm event.
- Captures and infiltrates up to 360,320 gallons of stormwater per 1.4-in storm event.
- Sequesters an estimated 3,831 lbs of atmospheric carbon annually in 134 newly-planted trees, equivalent to driving a single-passenger vehicle 4,165 miles.
- The tree canopies also intercept an estimated 822 gallons of stormwater runoff annually.

FUNDING SOURCES:

- The city of Kansas City, Missouri, Water Services department paid for the infrastructure portion of this project through wastewater rates. Funding from Kansas City's Public Improvements Advisory Committee (PIAC) was leveraged for additional street and sidewalk reconstruction.



- Water Storage



- New/Improved Drainage Infrastructure

