KC GREEN INFRASTRUCTURE

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MIDDLE BLUE RIVER BASIN PILOT PROJECT

Green infrastructure helps our community manage stormwater the way nature intended by capturing and utilizing rainwater where it falls. This project absorbs and filters 360,000 gallons of stormwater from approximately 100 acres in the Middle Blue River Watershed Basin. It also replenishes groundwater and sustains plants, trees, and natural habitats while working with gray infrastructure to increase the capacity of our underground pipes. What isn't absorbed overflows into the Blue River.

Project Area

Project Snapshot

- **Details:** Rain gardens, bioretention basins, pervious pavers and pavement, traffic-calming curb bump-out beds, new sidewalks.
- **Cost:** Construction was completed in 2012 for approximately $10,300,000.
- **Background:** This was a pilot project designed to test natural solutions and determine which would be most effective for Kansas City.
- **Noteworthy:** This project was awarded Envision™ Platinum rating for its environmental, social, and economic impacts on the community.

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WHAT DOES THIS SITE DO?

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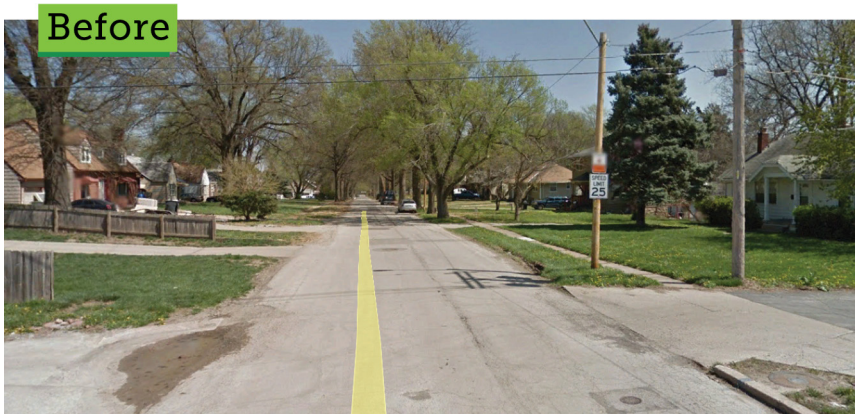
decreases the amount of water getting into our pipes, improves water quality, and reduces flooding, pollution, and trash in our streams, rivers, and lakes. The Middle Blue River Basin Pilot Project includes:

- **Rain gardens** collect and absorb stormwater from streets, rooftops, and sidewalks, allowing it to soak into the ground with the help of deeply rooted plants. These natural plantings also bring beauty to the neighborhood and support important pollinators like bees, butterflies, and hummingbirds.
- **Bioretention basins** are filled with plants to help absorb excess stormwater from streets, rooftops, and sidewalks. Layers of rock and soil store the water. A buried underdrain system drains the excess water, controlling the slow release of water back to the sewer system.
- **Permeable pavers** capture stormwater runoff by collecting water through the joints between pavers. The water moves through layers of gravel below the pavers and then soaks into the ground. Excess water is carried away through a perforated pipe and slowly released back to the sewer system.
- **Pervious concrete** absorbs stormwater through pores on the surface. The water then moves through layers of gravel below the pavement before soaking into the ground. Excess water is carried away through perforated pipe and slowly released back to the sewer system.