



Clean Water. Healthy Life.

# BEST PRACTICES *for* STORMWATER MANAGEMENT IN METROPOLITAN KANSAS CITY

## STREAM RESTORATION

Town Creek Riparian Restoration Demonstration, Independence & N Lexington Ave., Harrisonville, Missouri

### Goals

To stabilize a reach of Town Creek by redefining meanders, grading a flood level shelf, and planting native vegetation. This in turn, will reduce sedimentation, enhance the channel's natural conveyance capabilities, and reduce backwater flooding.

### Description

The project was designed to restore a 210 foot section of riparian corridor along Town Creek by reconstructing its existing channel. The stream's natural corridor has been significantly altered through widening, straightening and introducing lawn-type seed blends. The city of Harrisonville has experienced significant maintenance issues due to a combination of poor draining soil and non-native vegetation. The city aims to remedy the situation by replanting with more appropriate plants, shrubs and grasses.

A benched area was created on each side of the channel to increase water holding capacity during major storm events while base flow continues to be maintained within the central portion of the channel. Native grasses, wildflowers and wet meadow plants were used throughout the channel, stream banks and in the drainage area along the south side of the stream.

### Community Benefits & Lessons Learned

This project will provide the community with a functional stream that is capable of managing stormwater runoff and providing a recreational area. Plans for this stream corridor include a streamside walking trail from City Park to approximately 1/2 mile downstream to a park near Commercial Street. This project will be used to educate the public on alternatives to grey infrastructure and the beneficial uses of native plants.

The use of erosion control blankets with native seed and plant plugs worked to achieve immediate success, and provided provide bank stabilization within the first year of plant growth.

### Funding Sources and Partnerships

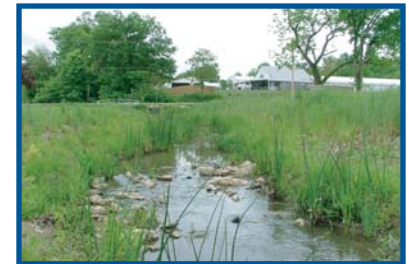
City of Harrisonville  
Mid-America Regional Council,  
U.S. Environmental Protection Agency (EPA) Region 7

### Contact

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*Channel before restoration with mostly non-native vegetation.*



*A pool and riffle system was reconstructed to mimic natural stream function.*



*Native wetland and prairie plants will augment the meandering channel design.*



*Street ditches adjacent to the stream were stabilized and revegetated with native plants.*