



Clean Water. Healthy Life.

BEST PRACTICES *for* STORMWATER MANAGEMENT IN METROPOLITAN KANSAS CITY

STORMWATER RECYCLING DEMONSTRATION

Stormwater Recycling, 7616 N.E. 56th Street, Kansas City, Missouri

Goals

To demonstrate that development doesn't necessarily have to increase runoff, flash flooding, and other negative downstream impacts. To show that a developer or builder can prove hydrologically that post construction stormwater runoff is equal to or less than preconstruction.

Description

This practice incorporates many backyard conservation best management practices including: erosion and sediment control, xeriscaping, composting, rain gardens, and storm drain stenciling. It also conserves city water treated for human consumption and eliminates any risk of backflow pollutants.

Directly above an unprotected storm drain in a new residential subdivision, a stormwater detention reservoir was constructed to reduce the two year peak flow (cfs) on four private lots, below the predevelopment runoff rate. This proves that urbanization and impervious surfaces do not have to contribute to flash flooding.

An automatic underground pop-up sprinkler lawn and landscape irrigational system was integrated utilizing reservoir stormwater. It shows that excess surface runoff and lawn fertilizer can be recycled to post-construction pervious surfaces as a viable alternative to lawn irrigation using expensive city water treated for human consumption. The practice also eliminates the risk of backflow, a documented problem with malfunctioning traditional residential and commercial sprinkler systems, which can potentially pollute the city water system.

Lessons Learned

Innovative ideas receive lots of attention from the Kansas City Star and the NRCS national website. The City of Kansas City, Missouri gives a detention basin credit of 10% to 50% off monthly stormwater fees.

Funding Sources and Partnerships

Self-funded. Letter of support given by Mid-America Association of Conservation Districts.

Contact

Private Citizen



Stormwater retention basin.



View of sprinkler system and its recycled water source.



Stormwater is collected at the downspouts