



Clean Water. Healthy Life.

BEST PRACTICES *for* STORMWATER MANAGEMENT IN METROPOLITAN KANSAS CITY

STORMWATER DETENTION

Stormwater Detention Facility, 39th & Coachman, Independence, Missouri

Goals

To retrofit a city owned, turfed, dry detention basin with a stable, vegetative cover using native plants; to reduce sedimentation; and to enhance the natural conveyance capabilities of the streams within the watershed.

Description

The 39th and Coachman detention basin comprises four to six acres that have been difficult for the city to maintain. The basin also provides minimal water quality function.

Improvements to this basin included stabilizing silt in the concrete channels and revegetating the basin with native grasses and wildflowers (moist soil and upland plants), and several trees and shrubs.

In the future, this project will link the basin to adjacent neighborhoods through mowed or wood chipped trails. Interpretive signs will inform the public of the project's multiple environmental and community values.

Community Benefits & Lessons Learned

Improved stormwater management and water quality are achieved through the use of native plantings in a dry detention facility. In addition, it is an excellent opportunity for on-going public education regarding the value of native plantings and their positive impacts to watershed health.

Maintenance of the plantings as well as public patience are the biggest challenges within the first one to three years of establishment with a project like this. Noxious weeds and annuals must be controlled to allow the native seedlings to become established. Overseeding and additional short-term stabilization measures may be required during establishment.

Funding Sources and Partnerships

City of Independence Water Pollution Control Department
Mid-America Regional Council
U.S. Environmental Protection Agency (EPA) Region 7

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The 39th and Coachman basin



One aspect of the project involves the stabilization of silt in the concrete channels.



The sides of the detention basin were planted with native prairie wildflowers and grasses.



Wetland species were planted throughout the central portion of the basin.