Kansas City's Dream - 10,000 Rain Gardens

KANSAS CITY, Missouri, June 27, 2006 (ENS) - Since mid-2005, Kansas City metropolitan area residents have built 86 rain gardens and counting - counting up to 10,000 - the number of rain gardens they want to build to reduce the amount of runoff that pollutes their waterways.

10,000 Rain Gardens is not a government program. It is a public-private initiative, involving citizens, corporations, educators, and nonprofit organizations and government agencies such as the Kansas City Metropolitan Area (KCMO) Water Services Department.

Even though it is not a government program, the 10,000 Rain Gardens initiative has attracted the support of elected officials.

Kansas City Mayor Kay Barnes, Johnson County Board of Commissioners Chairwoman Annabeth Surbaugh, and Jackson County Executive Katheryn Shields last summer joined in a call for regional participation in the environmental initiative.

Volunteers planted a rain garden in front of a Kansas City drain pipe to capture runoff and rain. (Photo courtesy 10,000 Rain Gardens)

"Protecting our streams and rivers from pollution and our homes and businesses from flooding requires a regional approach to be truly effective upstream and downstream," said Mayor Barnes.

A rain garden is a shallow basin filled with native plants that hold and filters rain. Stormwater runoff is captured in a small bowl-like garden that is planted and maintained with attractive, thirsty native plants whose roots grow deep into clay soils common to the Kansas City area.

They are easiest to install during construction, but they also can be retrofitted to any house, apartment or office building.
In part, 10,000 Rain Gardens is a public education initiative, and it appears to be working.

In 2003 the Mid-America Regional Council (MARC) conducted a first, benchmark water quality survey of residents in the metropolitan Kansas City area.

The survey is part of an ongoing effort to measure the impact that water quality education efforts in the region are having on the public’s overall awareness and behavior.

In that first survey, less than half those questioned thought they could do something to help improve water quality. Only 25 percent of those surveyed had seen or heard ads related to water quality, and of those, 59 percent said they saw the ads in newspapers or magazines, 39 percent on television, and 22 percent in brochures.

In 2004 and 2005, consultants for the KCMO Water Services Department conducted interviews throughout the region to determine how stakeholders viewed the issues of stormwater runoff and sewage overflowing into rivers and streams.

Stakeholders included neighborhood activists, elected officials, government employees, developers, economic development officials, educators, corporate citizens, and civic leaders.

There was consensus on the importance of these issues to the community's quality of life, and stakeholders wanted a regional approach. They suggested more green solutions to the problems of flooding and runoff polluting streams and rivers, and stressed the importance of a comprehensive public education plan to help citizens become part of the solution.

During 2005, MARC conducted its second water quality survey of residents in the metropolitan Kansas City area. This poll showed a majority of citizens, 53 percent, said yes, they have seen or heard information: 66 percent on television, 56 percent on bill inserts, 51 percent in newspapers, 25 percent on radio, and 24 percent in mail.
To the people behind 10,000 Rain Gardens the solution is obvious.

"Green solutions can have a powerful cumulative effect in reducing pollutants in our rivers and streams," 10,000 Rain Gardens says on its website. "Native plants are drought-tolerant, require no fertilizer, support wildlife, look great, and their deep roots help water to infiltrate into the soil instead of into the stormwater system."

Corporations are getting involved. Black & Veatch, a global engineering, consulting and construction company specializing in infrastructure development in energy, water and information, has installed the first corporate rain garden at its Kansas City headquarters.

Dan McCarthy of Black & Veatch wrote an editorial in the May 4 issue of the "Kansas City Star" urging other corporations to follow suit.

"As stewards of the first corporate rain garden in the Kansas City area, Black & Veatch would like to challenge other companies in the region to plant rain gardens on your premises and to launch programs that engage your employees in the 10,000 Rain Gardens initiative," McCarthy wrote.

"Black & Veatch has made a long-term commitment to this program, partially because the rain gardens initiative hits our sweet spots, the two things we really care about - water quality and our home town. It's our business goal to find engineered and natural solutions for problems we tackle in our communities," wrote McCarthy.

"Stormwater runoff and stream degradation affect water quality in Kansas City, and rain gardens can help prevent these problems."

Mayor Barnes is behind the initiative because Kansas City’s water and wastewater infrastructure is aging. Some water pipes and sewer lines have been in the ground more than 100 years. In 2003, Barnes formed
the Wet Weather Solutions Program, a city-wide sewer overflow, stormwater and waterways initiative. The panel is helping to shape a plan to address sewer overflows, stormwater management, waterway uses.

On August 2, 2005, voters in Kansas City approved the issuance and sale of negotiable, interest bearing waterworks and wastewater revenue bonds of the City in the amount of $500 million.

Over the next seven to 10 years, the bonds will fund new interceptor sewers and pump stations, pump station improvements, sewer rehabilitation, the over-flow control program for combined and separated sewers, wet weather projects, water-in-basement program, treatment plant improvements and sewer facility improvements, among other water needs.

Kansas City's Water Services Department is developing KC-ONE, a Comprehensive Stormwater Management Plan it calls "one Plan, one People, and one Voice for the management of stormwater throughout Kansas City."

The Water Services Department has identified 35 watersheds within Kansas City for which master plans have been developed or are currently being developed. KC-ONE will bring these 35 master plans together into one comprehensive plan and detail the city's strategy, policy and administrative plans for the future of the stormwater management program.

Meanwhile, rain gardens can help to relieve the pressure on aging city infrastructure.