Since 2003, MARC has convened a committee of representatives from local governments and environmental organizations to develop a regional watershed public education program. The committee was formed in response to numerous requests from local governments to develop a cooperative approach to water quality public education and to meet federal NPDES Phase I/II regulatory requirements. The committee’s efforts have provided a firm foundation for its goal of educating the general public about actions to reduce non-point source (NPS) pollution.

The Regional Water Quality Public Education Program is a comprehensive approach to raising public awareness about watershed issues and water quality in the Kansas City region. The long-term water quality public education strategy capitalizes on momentum created by past water quality awareness topics and community initiatives such as the Kansas Healthy Yards and Communities program. The program’s outreach campaign structure identifies several specific water quality issues to address throughout the year. However, the structure remains flexible by promoting additional messages as opportunities arise. Campaigns consist of varying levels of support and methods of outreach, as explained below.

During the past 13 years, the program has addressed several top NPS pollution issues facing our region. The program’s theme — “Clean Water. Healthy Life.” — focuses on changing behaviors to improve water quality, community health and quality of life. Each year, the Regional Water Quality Education Committee (WQEC), with MARC staff support, develops an NPS pollution-focused message that supports the program’s theme and determines the most effective means for disseminating the message. The committee’s education and outreach activities vary each year but typically consist of a media campaign, a mini-grant program, training, and education and outreach materials. This year, the program also partnered to host the Kansas City Urban Stormwater Conference scheduled for January 23-24, 2017.

The committee administers a biennial public attitude survey to gauge the public’s knowledge of and attitudes about water quality in the metropolitan area. Survey questions are designed to measure the impact that education efforts have on the public’s overall awareness of water quality concerns and on behaviors that impact water quality in the region. The water quality survey provides a benchmark for objective evaluation of public education initiatives over time, and provides guidance for future public policy, planning and education efforts. Our seventh biennial survey, conducted in late 2016, highlighted the following:

- Eighty-two percent of the residents surveyed were very or somewhat concerned about pollution in lakes, streams, and other waterways in the Kansas City area, and seven percent were not concerned.
- Residents were asked if they had used various methods to manage how rainwater left their property. Fifty-seven percent said that they had placed flower beds or landscaping to absorb rain runoff from their property, and 17 percent had captured rain water in a rain barrel.
- Eighty-seven percent of residents agree that it is important to improve the quality of water in lakes and streams in their community; 78 percent feel the quality of local streams affects property values, and 77 percent would support local government working with other cities and counties to improve water quality.

View the 2016 Survey online at http://marc.org/Environment/Water-Resources/Reports-and-Publications/Reports
2016 PROGRAM ACCOMPLISHMENTS

**Media Campaigns**

In 2016, the public outreach campaign continued to target residents and homeowners, focusing on the use of native plants to improve water quality. Campaigns typically include a variety of elements such as paid advertising, earned media, printed materials and other activities. MARC staff helps the committee with strategic planning for media campaigns, including message development, writing, graphic design and advertising purchases.

**Native Plants**

The 2016 native plant outreach campaigns featured “Leisurely Landscaping” in the spring and “Native Trees and Shrubs” in the fall. The media effort, specifically targeted to reach homeowners, local governments and contractors, and those interested in gardening, landscaping, and green living in the Kansas City region. The goal of the campaign was to promote the use of native plantings to improve water quality. Additionally, the campaign sought to direct individuals to the MARC water quality website landing page for further education relating to water quality issues.

The fall campaign delivered messaging in forms besides paid advertising, including blog posts and web content. Content addressed the benefits of native trees and shrubs for fall color, species that attract birds and beneficial insects, and urban forestry mobile apps.

<table>
<thead>
<tr>
<th>Medium</th>
<th>Number of Ad Placements</th>
<th>Estimated Gross Impressions</th>
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</thead>
<tbody>
<tr>
<td>Online</td>
<td>22</td>
<td>2,324,708</td>
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<tr>
<td>Print</td>
<td>8</td>
<td>2,056,000</td>
</tr>
<tr>
<td>Radio</td>
<td>30</td>
<td>52,000</td>
</tr>
<tr>
<td>Social Media</td>
<td>15</td>
<td>817,026</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>5,249,734</strong></td>
</tr>
</tbody>
</table>

The campaigns reached over 5.3 million impressions in 2016. Pinterest, a new advertising channel used this year, received the highest number of number of impressions out of all social media channels used. The total campaign cost was $5.51 for every 1,000 times our messages were seen or heard.
Each year, the committee offers funding opportunities to local nonprofit and educational organizations for education and outreach events related to reducing stormwater runoff and improving water quality in area creeks and streams. Proposals undergo a competitive selection process and are evaluated by a grant selection subcommittee. The Water Quality Education Committee received seven grant applications requesting a combined $28,160. Grants were awarded to the following organizations:

**Friends of the Kaw ($1,778)**
Friends of the Kaw (FOK) managed and facilitated a program designed to clean up and promote stewardship of the boat ramps along the Kansas River, as well as educate the public about the harmful effects that litter has on the environment and their drinking water. FOK worked within each community to engage local citizen groups to “adopt” their local boat ramp.

**Food for People KC ($1,000)**
Food for People KC is dedicated to organic farming and native habitats in order to improve the health of our communities and our environment. This project addressed educating youth and adults about the importance of native plants in removing pollutants from the air and soil in order to improve stormwater quality. Participants learned what native plants are, how they protect air and water quality, how to plant them, and their relationship to pollinators and other insects. The project included the creation of a native habitat curriculum for 10 community members — five adults and five children — and creation of a native habitat at Highland Organic Farms.

**Green Works in Kansas City ($2,935)**
Green Ink students participated in a “trash mob” project that involved dressing up in funny costumes, gathering rakes, bags and gloves and cleaning up an urban area/street that is near a stream. Students shot video of the trash mob and interspersed the action with dialogue and visual aids, including how to do your own trash mob, and what happens to trash on the ground. They will also design and distribute a flyer to alert residents in the area that they have been hit by a “trash mob,” explaining the impact on our water from trash left on the ground.

**Healthy Rivers Partnership (Project Blue River Rescue) ($3,000)**
Project Blue River Rescue (PBRR) XXVI was held April 2, 2016, at the Lakeside Nature Center in Swope Park. Held annually, PBRR is the largest one-day stream cleanup in Missouri. Thousands of volunteers have invested more than 100,000 hours removing solid waste from the banks of the Blue River as part of this event. For 26 years, it has offered a perfect demonstration of how storm drains convey trash in a non-point source way. The project serves as a model for others to follow and the planning team has been instrumental in assisting other organizations with cleanup activities.
Healthy Rivers Partnership (Big Muddy Cleanup) ($2,387)
Healthy Rivers Partnership gathered volunteers at Kaw Point Park on Oct. 1, 2016, for the Big Muddy Cleanup. Goals of the event included providing education to the public about non-point source pollution, and demonstrating best management practices through a river cleanup.

Little Blue River Watershed Coalition ($3,900)
The Little Blue River Watershed Coalition will hold the Missouri River Watershed Festival in the spring of 2017, from 9 a.m.–2 p.m., for students (grades 5–8) at the Lakeside Nature Center. The Missouri River Watershed Festival educates students about the adverse impacts of stormwater runoff and water pollution.

StoneLion Puppet Theatre ($5,000)
StoneLion Puppet Theater hosted a festival series to provide public education about the adverse effects of stormwater runoff and water pollution and promote policies and best management practices that reduce runoff and pollution.

This community outreach program was a series of three, free water festivals in public spaces that focused on educating adults and children about how their actions affect the water system and providing best management practices people can implement in their daily lives. Each event was held in partnership with a community center, library or event space in the Greater Kansas City Area.

TRAININGS

Webcasts
The committee hosted six webinars by the Center for Watershed Protection in 2016:

• “Surviving an MS4 Compliance Audit,” Mar. 16th, 2016
• “Education Programs to Enhance Pollutant Removal,” May 18, 2016
• “Green Infrastructure & Green Jobs: The Latest Trends,” June 15, 2016
• “Incentivizing BMP Installation in Communities with Stormwater Utilities,” Sept. 14, 2016
• “Non-Traditional MS4s,” Nov. 16, 2016

Stormwater Training
The Water Quality Education Committee, in cooperation with the Missouri Water Environment Association and Kansas Water Environment Association, will host the first Greater Kansas City Urban Stormwater Conference on January 23–24, 2017. The conference will convene national, regional and local stormwater professionals to discuss growing issues around urban stormwater management. The program will include speakers from utilities, public works, planning, parks departments, engineering firms, regulatory entities and nonprofit organizations. Topics will include the role of integrated watershed planning and a keynote presentation from Howard Neukrug, previous CEO and commissioner of Philadelphia Water and a U.S. Water Alliance senior fellow.
Native Plants and Rain Gardens

Continued to distribute:
• How to “Build Your Own Rain Garden” and “Know Your Roots” brochures.
• Rain gauges designed with native species landscapes as promotional giveaway items.
• Outdoor-rated, “Do Not Mow/Native Planting” signage for BMPs.
• Black-eyed Susan (Rudbeckia hirta) seed packets with “Blue Thumb — Planting for Clean Water” message.

Pet Waste

Continued to distribute:
• “Pick Up After Your Pet” brochures.
• Outdoor-rated, “Pick Up After Your Pet” signage to local municipalities.
• Portable, refillable pet waste bag dispensers with “Pick Up After Your Pet” message as promotional giveaway items.

Lawn Care

• Continued to distribute “Build Your Own Rain Barrel”, “Redirect or Disconnect Your Downspout”, “Know Your Soil”, “Making and Using Compost”, and “Use Lawn Chemicals Wisely” brochures.

Brochure Translations

• Continued to use existing supply of Spanish-language brochures.
• Created and distributed double-sided doorhangers (in English and Spanish) as a companion outreach tool for neighbors near Stormdrain Marker installations.

General Stormwater Education

• Continued to distribute Stormdrain Inlet Markers for local municipalities.
• Continued to distribute “Keep Sediment Out of Our Water”, “Know Your Watershed”, “Protect Our Streams” and “Stormdrain Stewardship” brochures.
• Continued to make the committee’s Water Quality Education Program banner available for community events and functions.
• Continued to distribute automotive trash bags with the “Stop Littering” imprinted message.
**ADDITIONAL WORK**

**Sponsorships**
In October, the WQEC co-sponsored a Kansas City Native Plant Initiative (KCNPI) workshop hosted by Johnson County Park & Recreation District. The day started with an overview of Prairie Restoration given by Doug Ladd of The Nature Conservancy, and continued with presentations and panel discussions on subjects such as connecting the community with native plantings, funding and seed selection. In the afternoon, attendees broke into groups and toured three restoration field sites located within Shawnee Mission Park.

**Art Requests in 2016**
- Shared “Know your Roots” illustration, comparing roots of native plants with non-native plants, with Janet Allen, President of Habitat Gardening in Central New York, Wild Ones Chapter.
- Shared rain garden and stormwater brochure illustrations for use by Rosedale Development Association, Kansas City, Kansas.

**Blue Thumb — Planting For Clean Water**
The committee continues to use the Blue Thumb — Planting for Clean Water branding for its media campaign and giveaway materials to encourage planting of natives as a solution for stormwater pollution. In 2016, MARC staff was elected to represent the WQEC in the Blue Thumb Steering Committee. The role of the Steering Committee is to assist in strategic planning of outreach and education activities, as well as advise Blue Thumb staff on specific program activities. Additionally, the Steering Committee provides leadership in visioning program growth and maintaining relevance to its national partners.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brochures</td>
<td>5,970</td>
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<tr>
<td>Storm Drain Markers</td>
<td>105</td>
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<tr>
<td>Portable/car Litter Bags</td>
<td>500</td>
</tr>
<tr>
<td>Pet Waste Public Signage</td>
<td>69</td>
</tr>
<tr>
<td>Native Planting Public Signage</td>
<td>68</td>
</tr>
<tr>
<td>Seed Packets</td>
<td>700</td>
</tr>
<tr>
<td>Rain Gauges</td>
<td>370</td>
</tr>
<tr>
<td>Pet Waste Bag Dispensers</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,582</strong></td>
</tr>
</tbody>
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**Map of Blue Thumb Partners**

Matt Garrett of Johnson County Parks and Recreation District introduces one of many prairie restoration sites in Shawnee Mission Park as part of the KCNPI Prairie Workshop.
FUNDING

In January 2016, MARC submitted a program funding request to local governments for $165,000. During the course of the year, 23 local governments supported the program. Participating governments are listed below.

PARTICIPATING GOVERNMENTS

Belton, Missouri
Blue Springs, Missouri
Clay County, Missouri
Excelsior Springs, Missouri
Peculiar, Missouri
Platte County, Missouri
Kansas City, Missouri
Lake Lotawana, Missouri
Lake Waukomis, Missouri
Liberty, Missouri
Lenexa, Kansas **
Lee’s Summit, Missouri
Overland Park, Kansas **
North Kansas City, Missouri
Gladstone, Missouri
Independence, Missouri
Jackson County, Missouri
Johnson County, Kansas *
Raymore, Missouri
Raytown, Missouri
Sugar Creek, Missouri
Weatherby Lake, Missouri
Unified Government of Wyandotte County /
Kansas City, Kansas**

*(Contributes for all Johnson County cities and unincorporated areas)
**(Contributes additional funding above standard per capita rate)

WQEC COMMITTEE CO-CHAIRS

Lara Isch, Water Quality Educator
KC Water Services,
Kansas City, Missouri

Heather Schmidt, Water Quality Specialist
Public Works and Infrastructure,
Johnson County, Kansas

MARC STAFF

Tom Jacobs, Director of Environmental Programming
Alecia Kates, Water Quality Planner
Kym Bledsoe, Public Affairs Coordinator
Nordia Epps, Public Affairs Coordinator
Carmellya Anderson, Marketing Coordinator II,
Government Training Institute
Emily Jahner, Environmental Planning Intern

CONTACT

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Clean Water. Healthy Life.
www.marc.org/water